

Summary of Key Briefing Points:1030-1130am MST January 25, 2016

Current Conditions as of Monday 12Z 25 January

Tropics and Midlatitudes

Over the Tropical Pacific:

- Convection: Strong, large scale, organized convective region from Eq 160W, to 5N 145W. Developed during the night, and has intensified.
 - Strong Cirrus Shield poleward Outflow evident to about 8N on NW Flank
 - principal convective feature in the near-EQ pacific from 160E-100W
- Two other Active convection regions 12Z Sun:

Tropical Outlook

- By 00Z Tuesday 25 Jan, principal divergent outflow in the 0-10N band expected to have developed within mission domain.
 - Confidence for large scale poleward outflow in mission region is high based on GFS/EC/FIM/CMC model agreement....though mesoscale details differ.
- By 00Z Wednesday 25 Jan, principal divergent outflow in the 0-10N band expected to continue in the mission domain.
 - Confidence for large scale poleward outflow in mission region is moderatley high based on GFS/EC/FIM/CMC model agreement.... mesoscale details differ.
- Slight westward movement of this large scale convective element, may dictate some westward adjustment of flight mission on Wednesday compared to Tuesday.

--- in summary, the preliminary indication form 00Z/06Z/12Z Mon forecasts is Monday, Tuesday and Wednesday would be favorable convective regimes for flight missions S

Midlatitude Outlook

Short Term:

- Quiet CA next 24 hours.

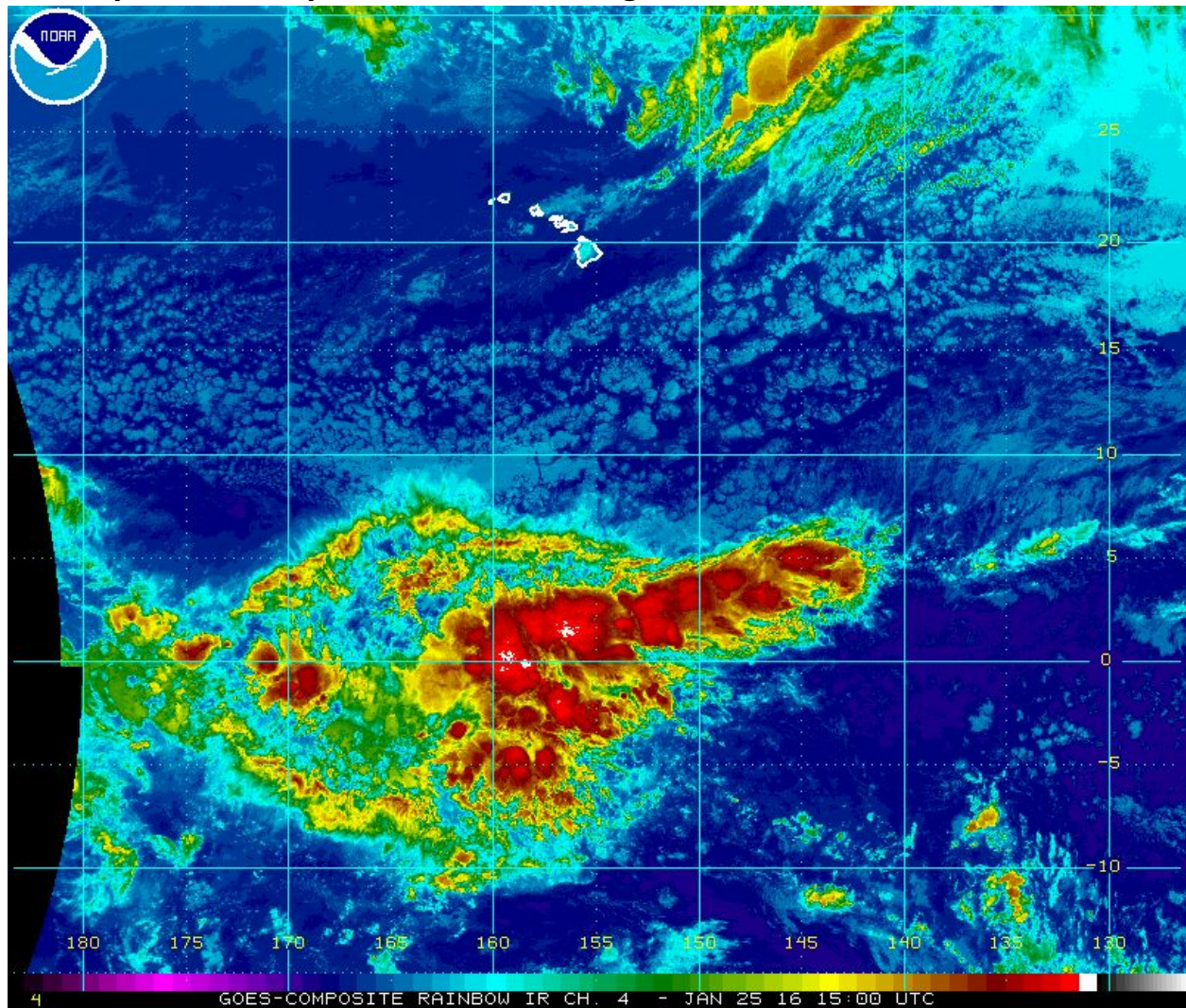
Medium - Long Term:

- High confidence that CA will be mostly dry in the period 24 Jan thru Thu 28 Jan.
---- GEFS ensemble in strong agreement to 168 hr lead (Thur 28 Jan) for a transient Ridge on the Pacific coast.
- Days 7-10 indicates a flattening of the West Coast ridge, exposing CA to intrusions of moisture
--- moderate confidence of a return to wetter conditions for CA from Fri 28 Feb thru Sun 31 Jan some uncertainty between EC and GFS on Fri/Sat storm potential for

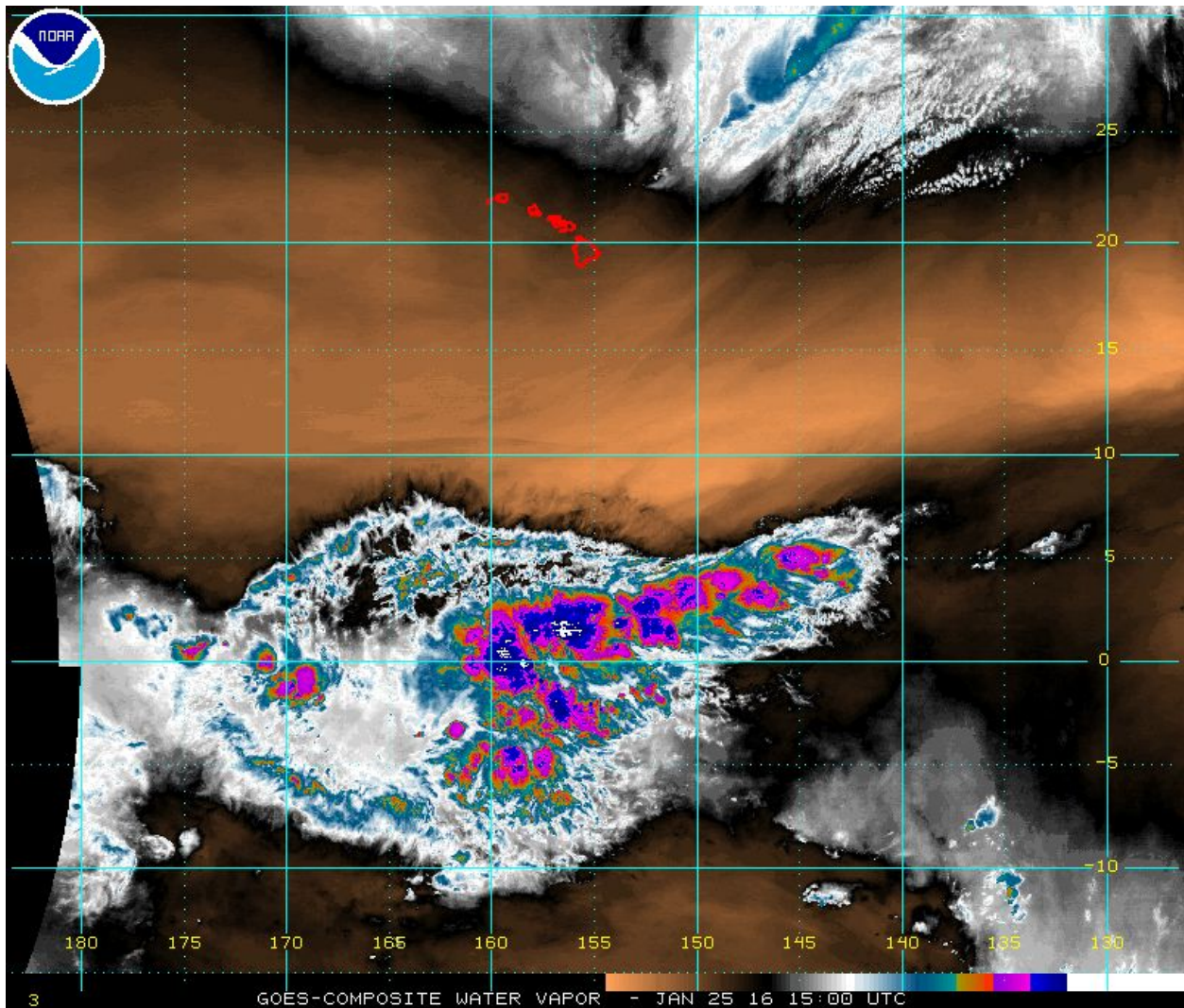
CA

- Will keep close eye on future forecast as to the threat of CA storms in the first week of February (days 11-15 in the forecasts...), as the Global Hawk is set to deploy Tuesday Feb 2.
- GFS ensemble shows strong subtropical jet impinging the West Coast in the long range (valid 2 February)...storms are likely to be embedded in this pattern, though the daily synoptic details cannot be discerned at this time.
- Major changes predicted in Wk 2 (31 Jan - 8 Feb), with active wet CA regime.

Monday 15Z January 25 Enhanced IR Image

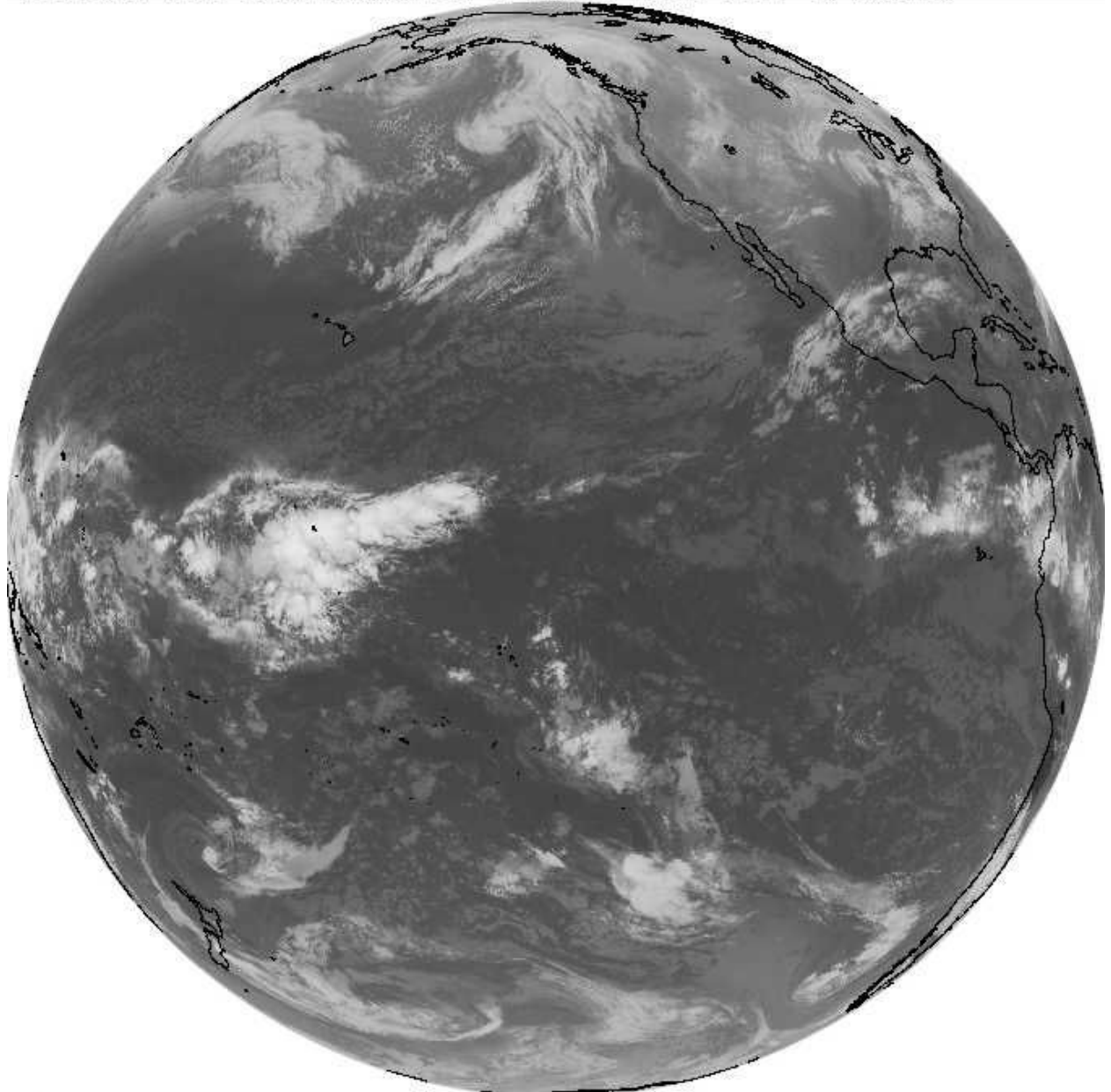


Monday 15Z January 25 Water Vapor Image



Mon 15Z January 25 GOES West IR Image

GOES WEST FULL DISK LONGWAVE IR 25 JAN 16 15:00 SSEC: UW-MADISON



1

2016025 150000

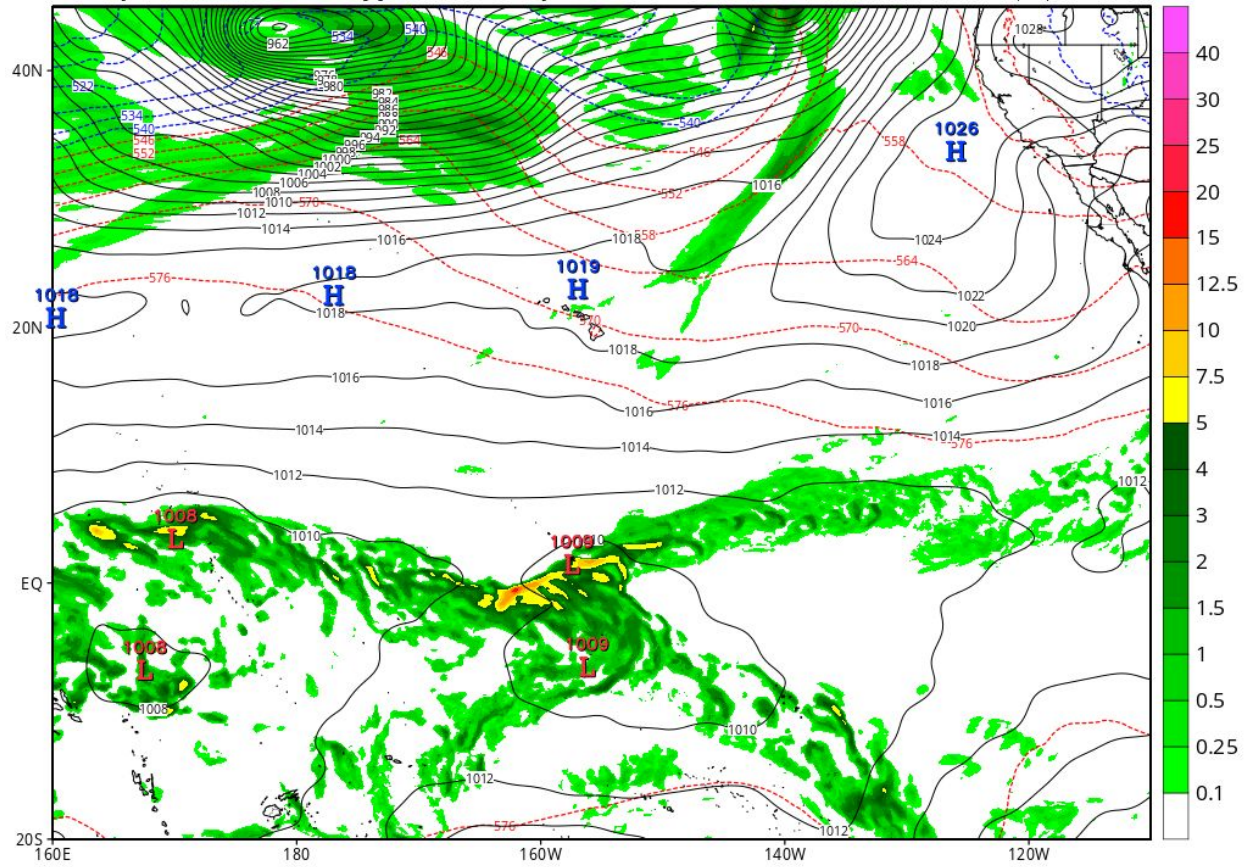
McIDAS

GFS 12Z Mon Jan 25 Analysis : SLP /PCPN-6hr

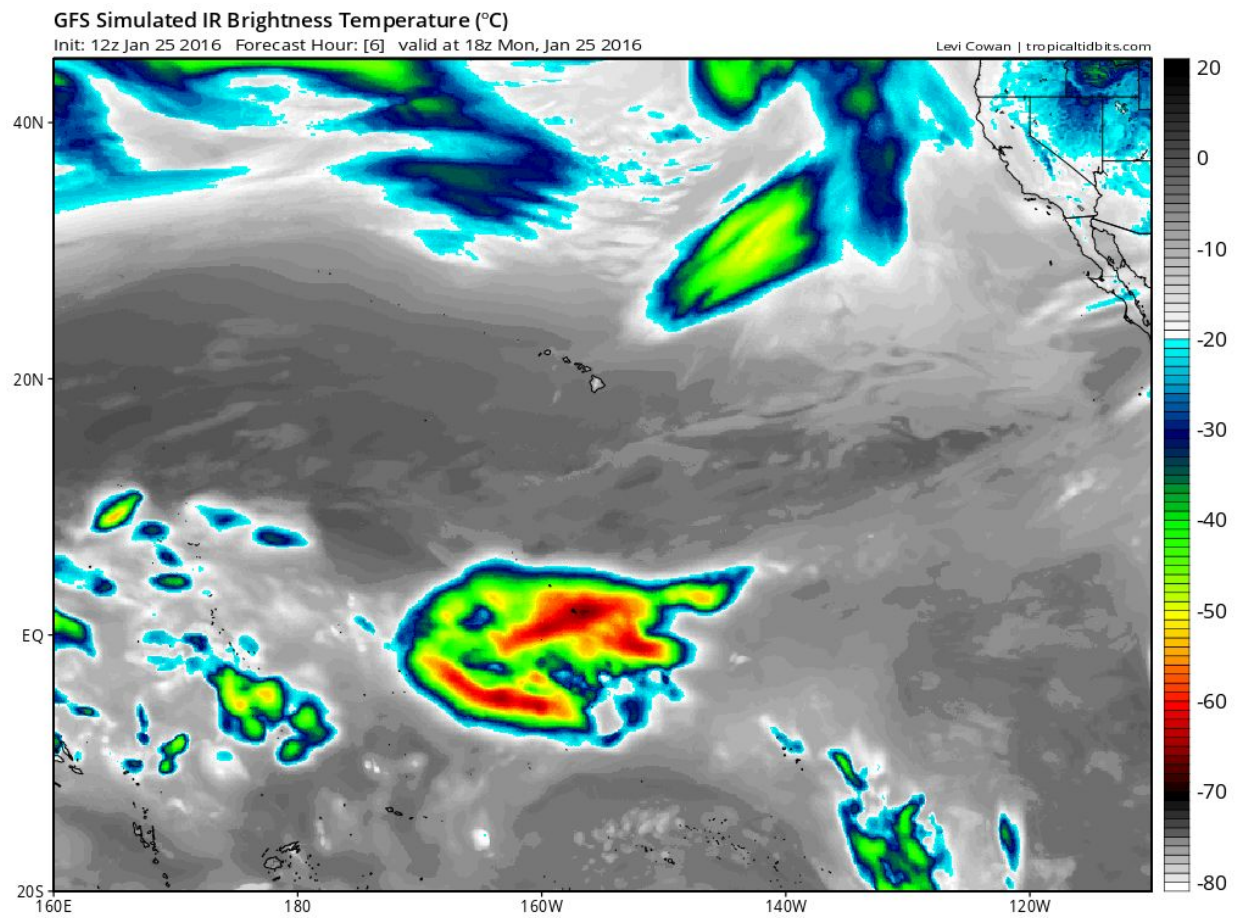
GFS 6-hour Averaged Precip Rate (mm/hr), MSLP (hPa) & 1000-500mb Thickness (dam)

Init: 12z Jan 25 2016 Forecast Hour: [6] valid at 18z Mon, Jan 25 2016

Levi Cowan | tropicaltidbits.com



GFS 12Z Mon Jan 25 Analysis : IR Brightness Temps /6hr

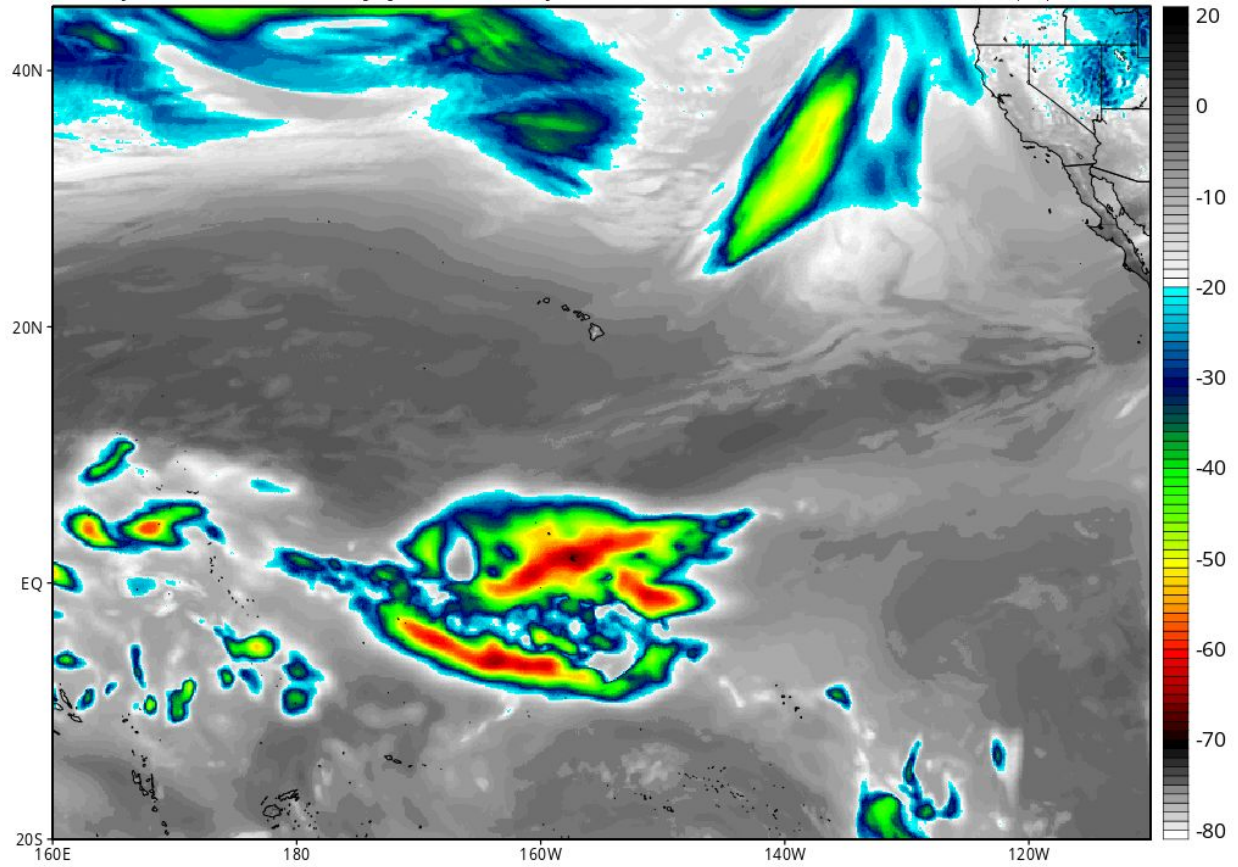


12-HR GFS 00Z Tues Jan 26 : IR Brightness Temp

GFS Simulated IR Brightness Temperature (°C)

Init: 12z Jan 25 2016 Forecast Hour: [12] valid at 00z Tue, Jan 26 2016

Levi Cowan | tropicaltidbits.com

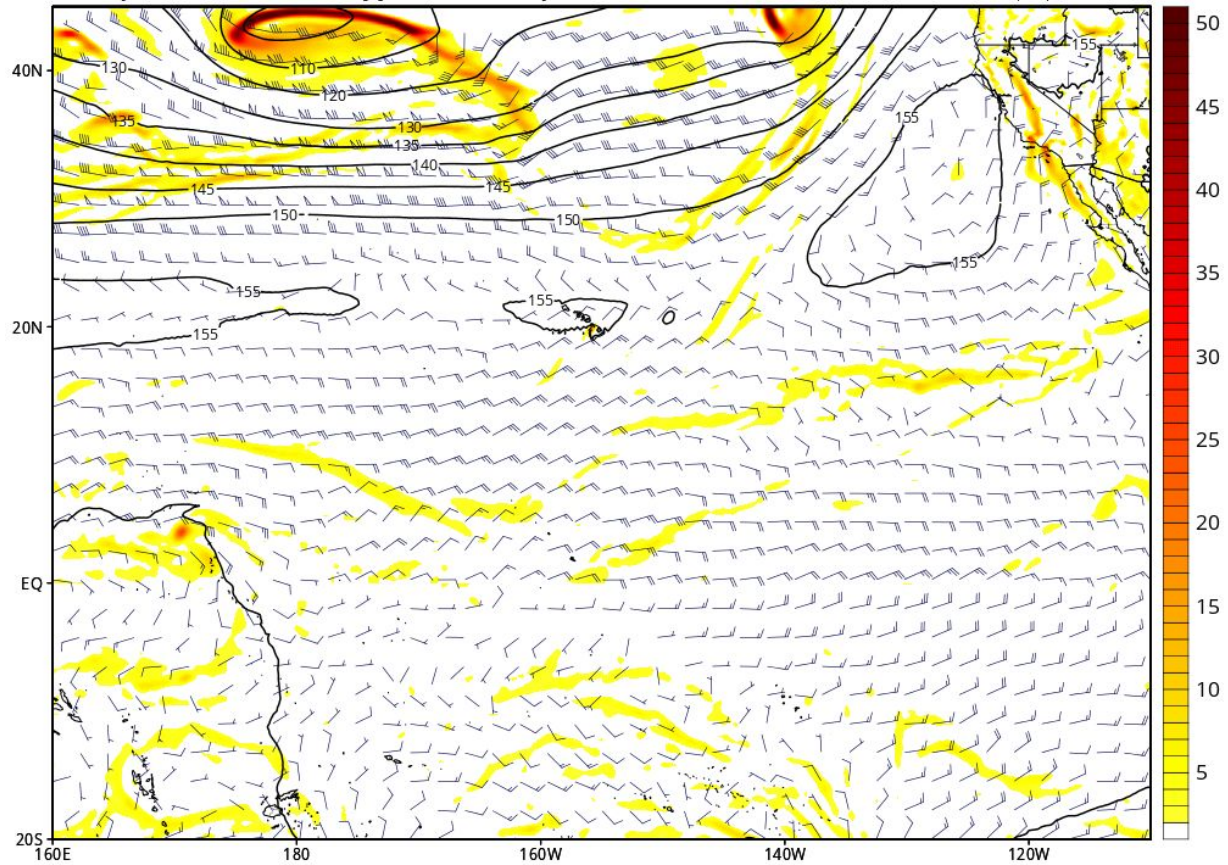


GFS 12Z Mon Jan 25 Analysis : 850mb

GFS 850mb Geopotential Height (dam), Cyclonic Vorticity (10^6 s^{-1} , shaded), and Wind (kt)

Init: 12z Jan 25 2016 Forecast Hour: [6] valid at 18z Mon, Jan 25 2016

Levi Cowan | tropicaltidbits.com

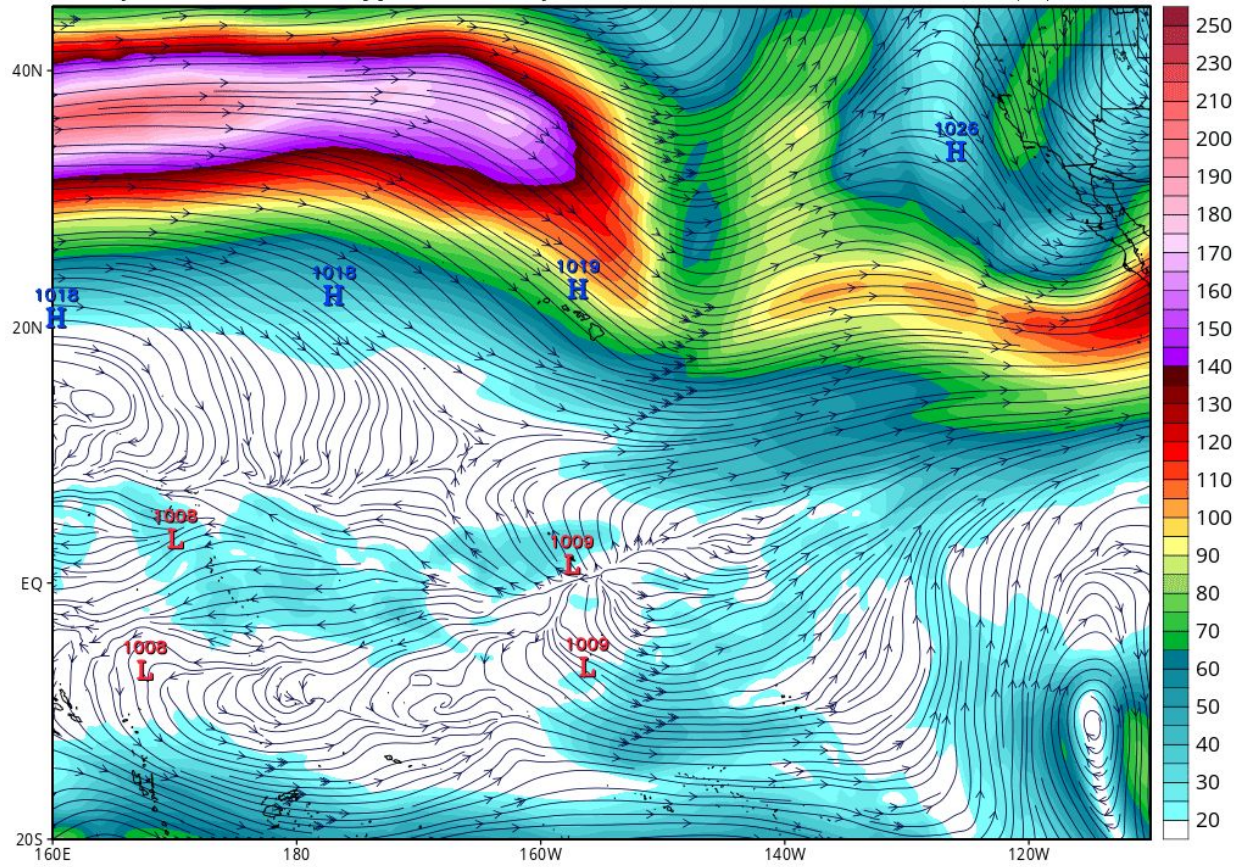


GFS FCST 200 mb 18 Z Mon 25 January (from 12Z Mon run)

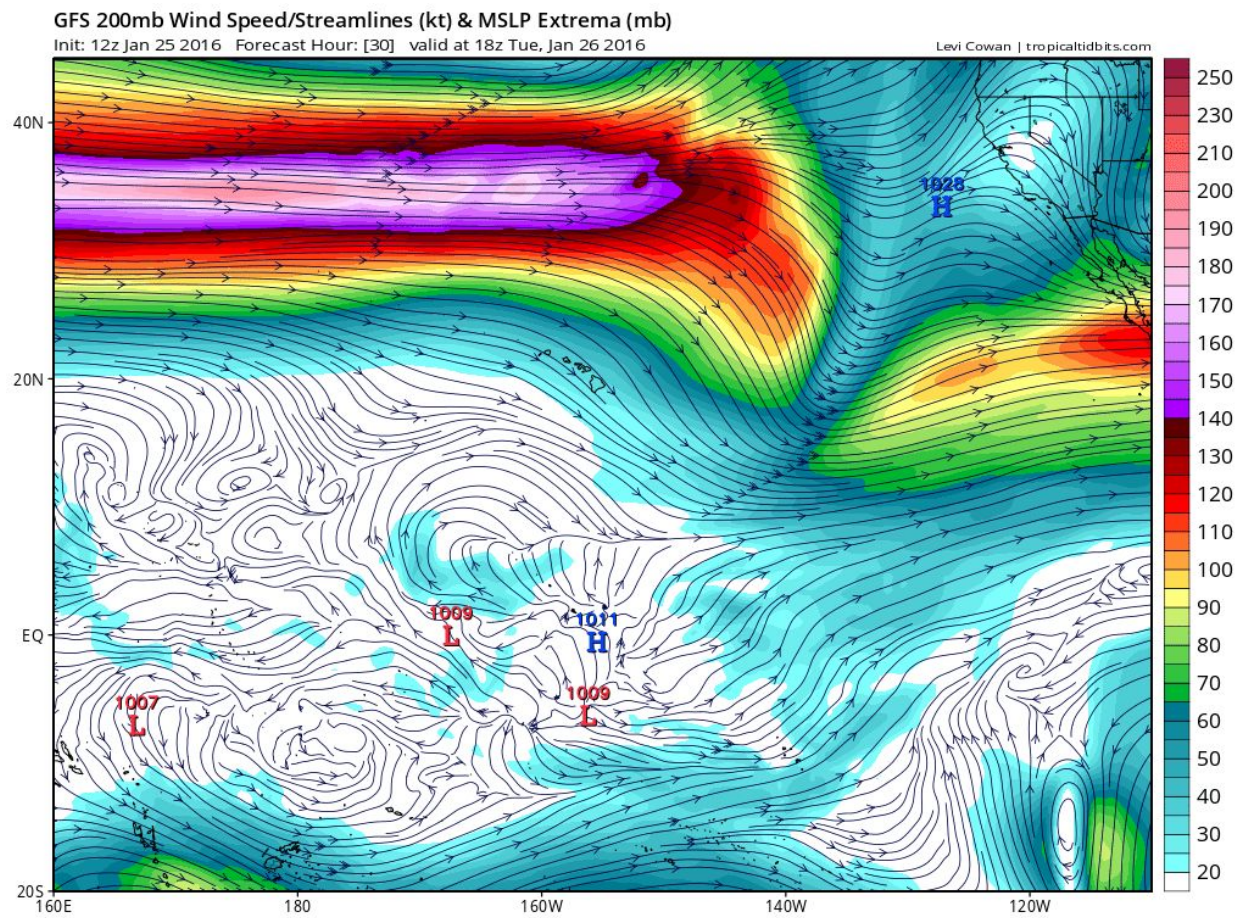
GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

Init: 12z Jan 25 2016 Forecast Hour: [6] valid at 18z Mon, Jan 25 2016

Levi Cowan | tropicaltidbits.com



GFS FCST 200 mb 18 Z Tue 26 January (from 12Z Mon Run)

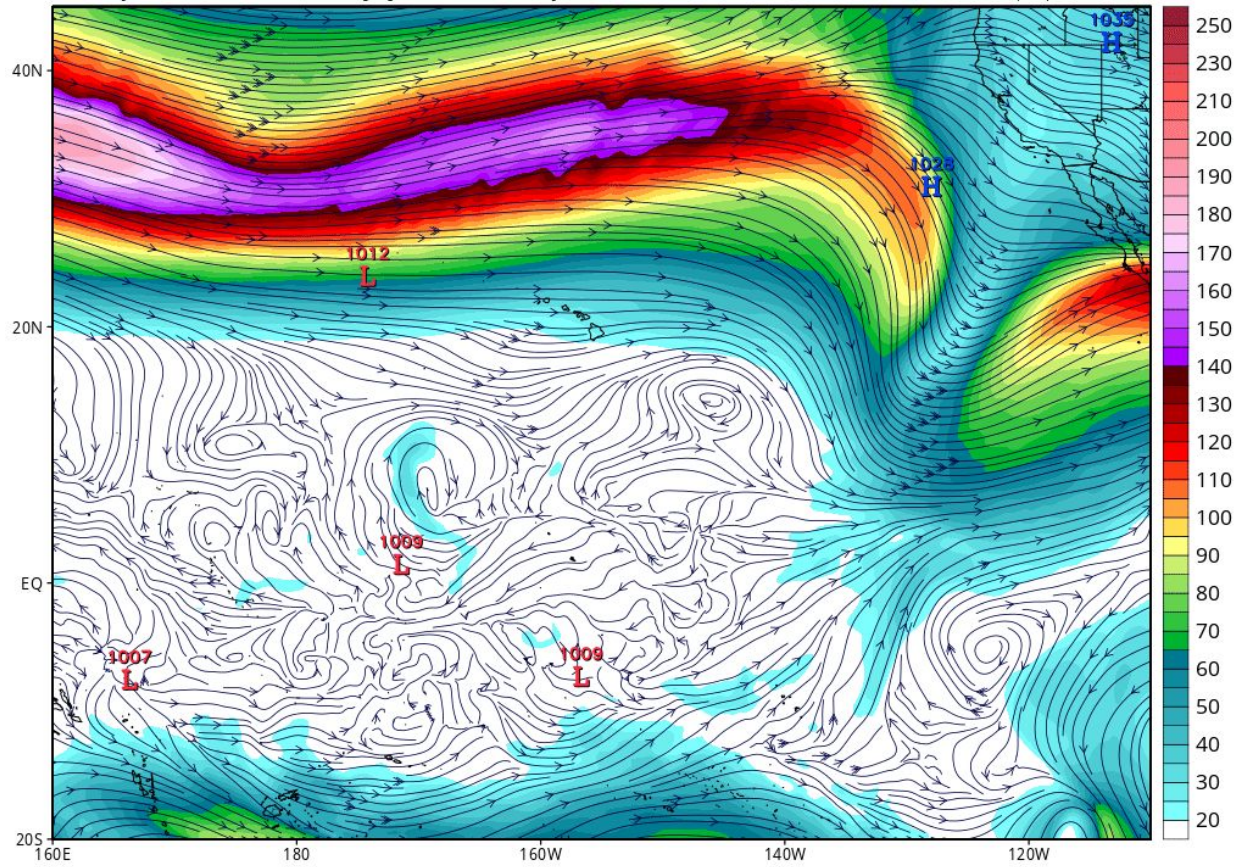


GFS FCST 200 mb 18 Z Wed 27 January (from 12Z Mon run)

GFS 200mb Wind Speed/Streamlines (kt) & MSLP Extrema (mb)

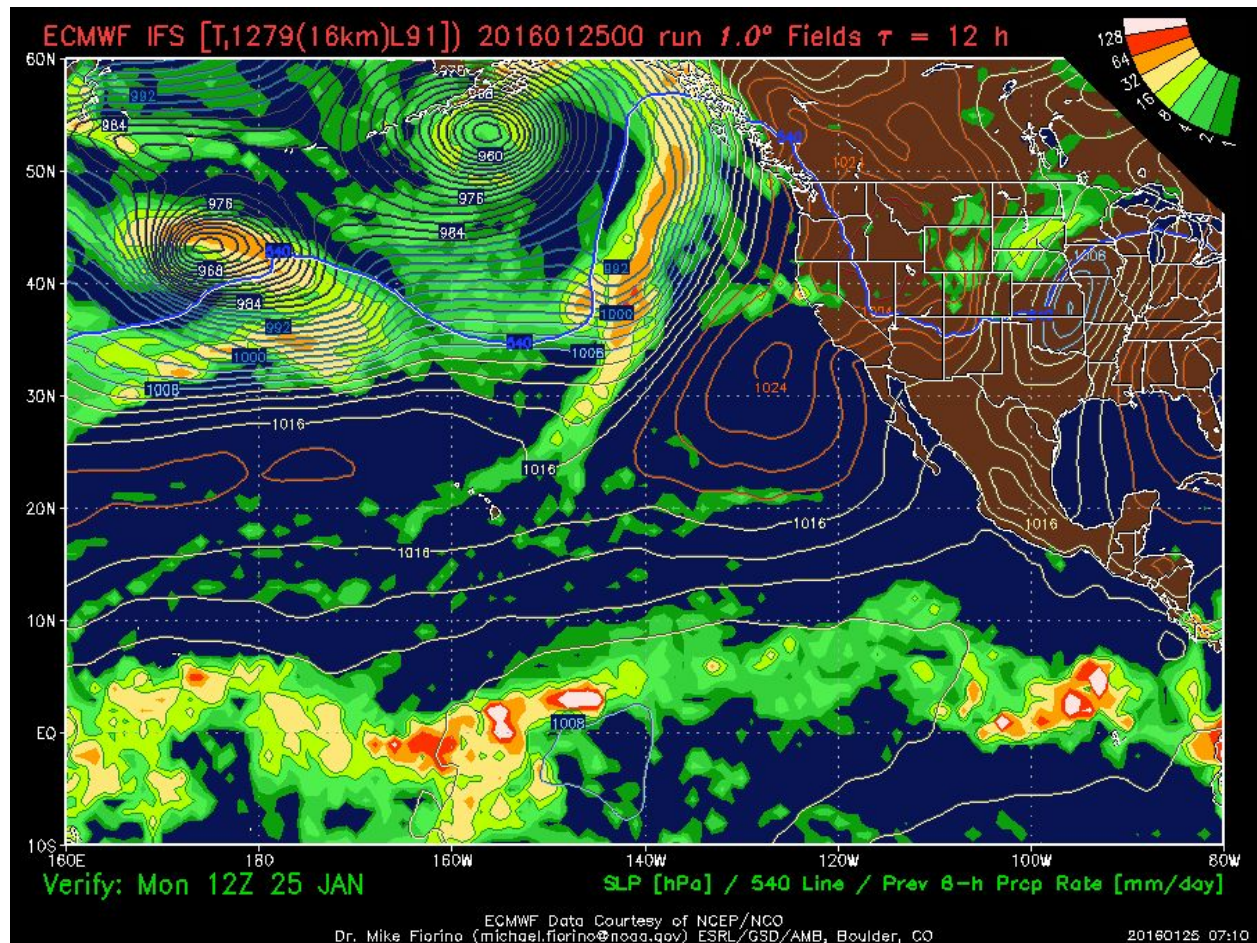
Init: 12z Jan 25 2016 Forecast Hour: [54] valid at 18z Wed, Jan 27 2016

Levi Cowan | tropicaltidbits.com

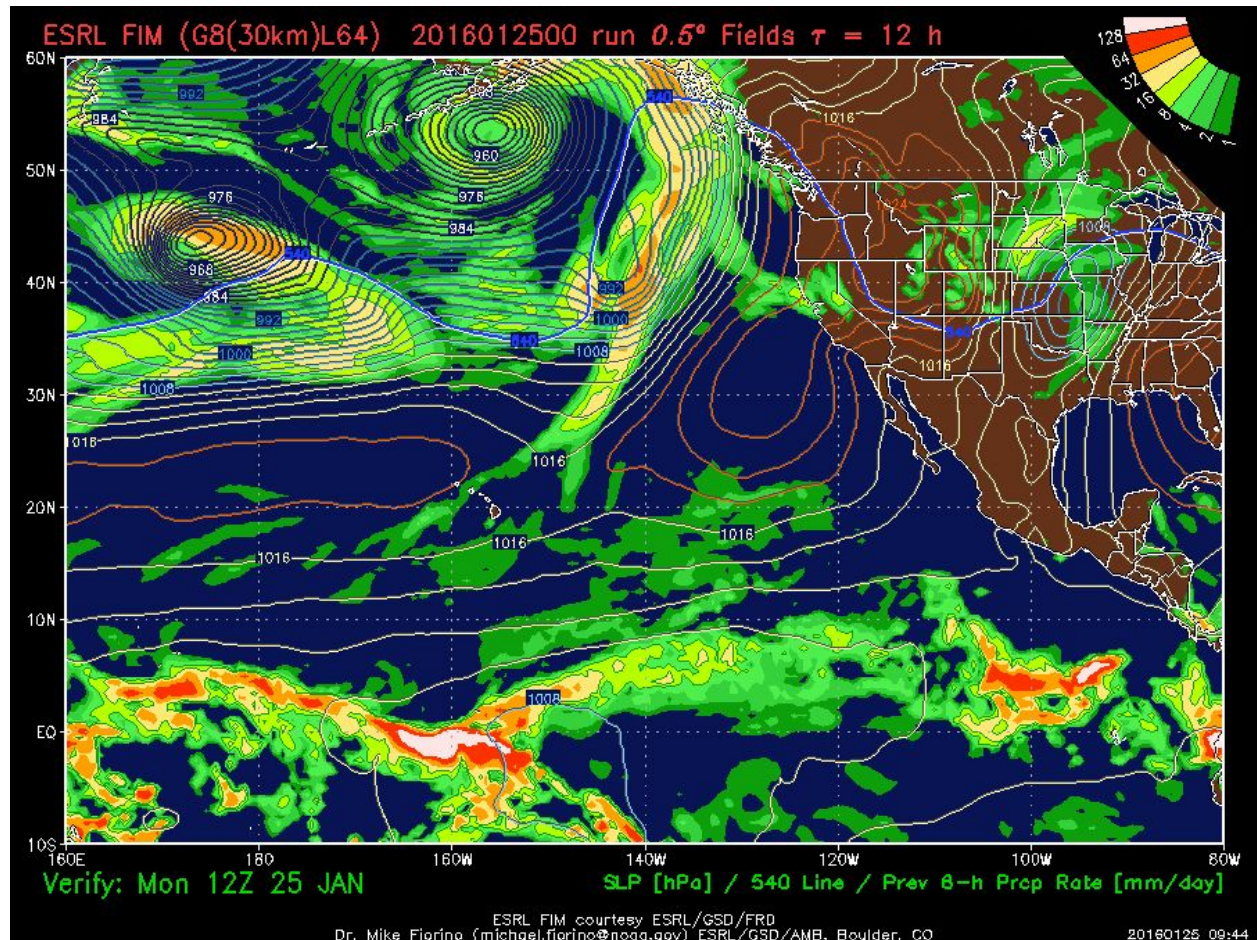


Short Term Fcsts Valid 12Z Mon Jan 25 (2AM Mon HNL Time)

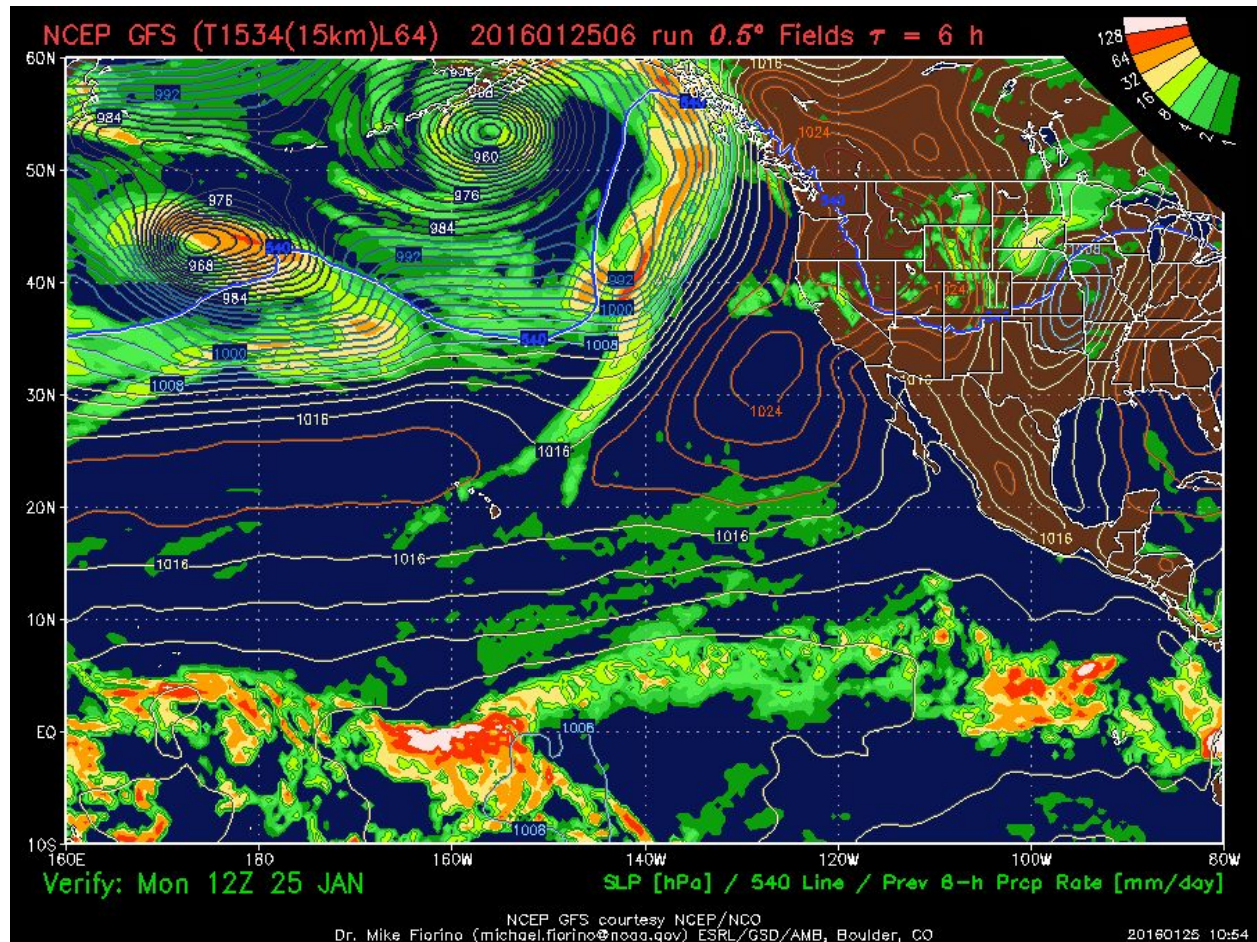
ECMWF 12HR Fcst for 12Z Mon 25 Jan (from 00Z Mon Run)



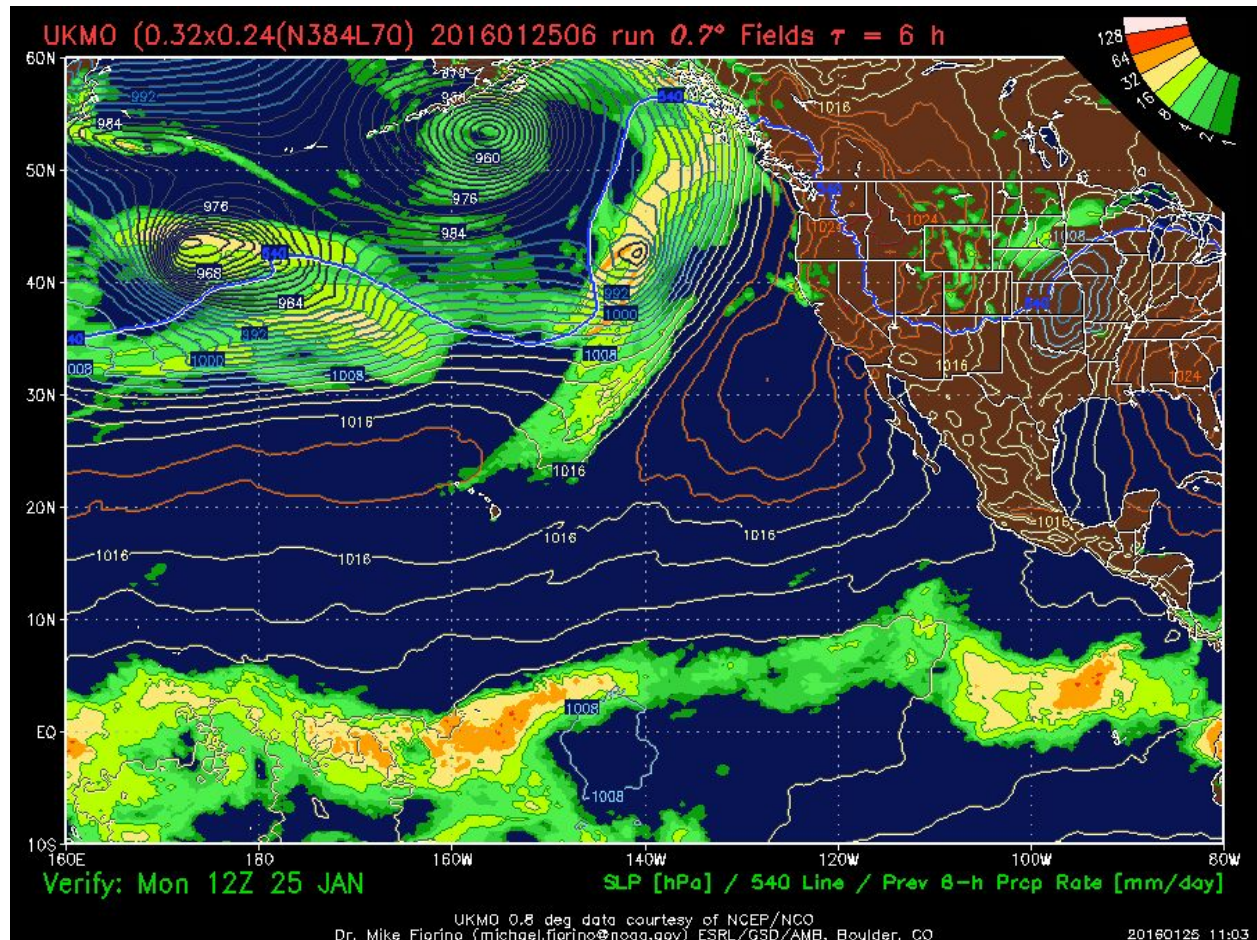
ESRL-FIM 12HR Fcst for 12Z Mon 25 Jan (from 00Z Mon Run)



NCEP-GFS 06HR Fcst for 12Z Mon 25 Jan (from 06Z Mon Run)

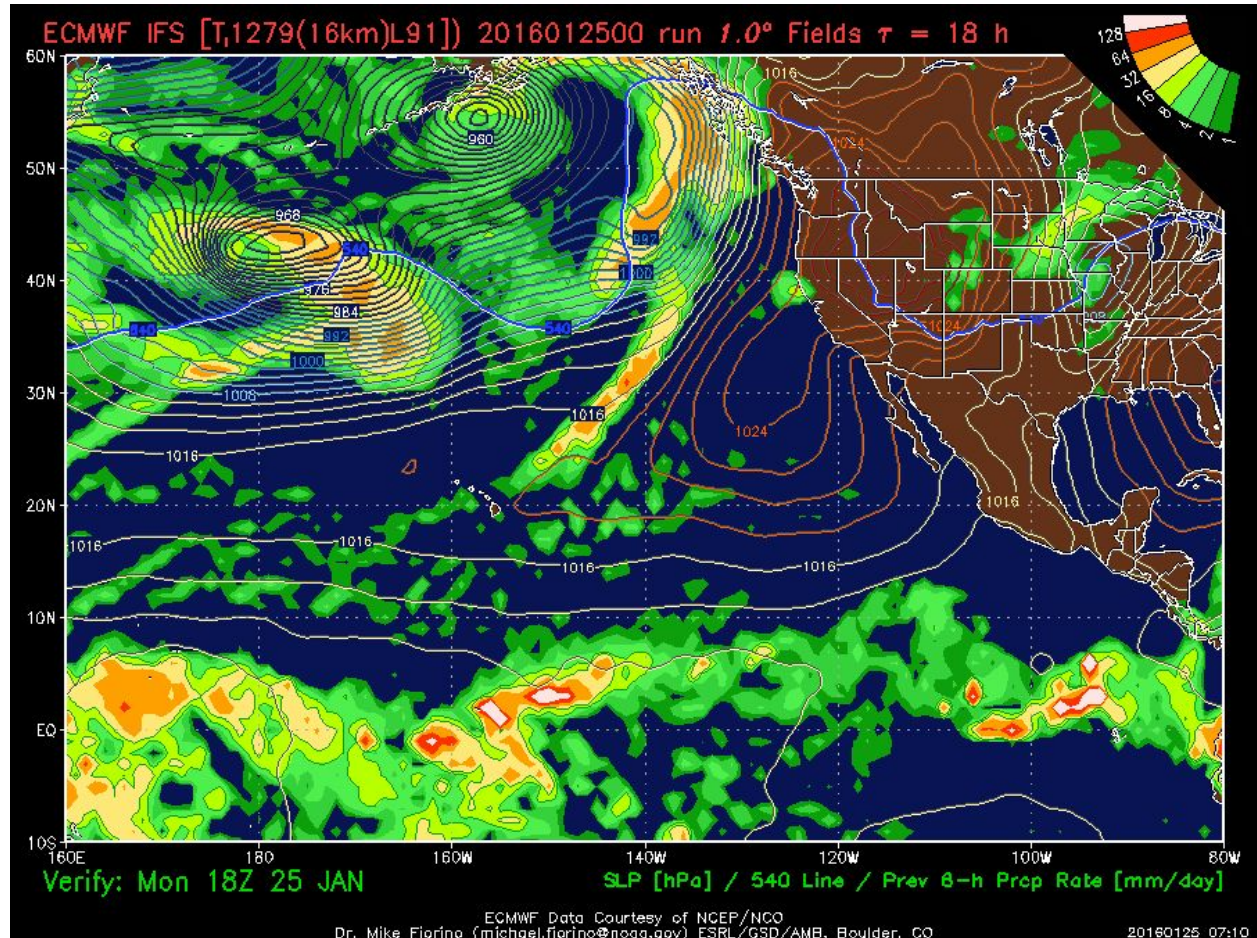


UKMO 6HR Fcst for 12Z Mon 25 Jan (from 06Z Mon Run)

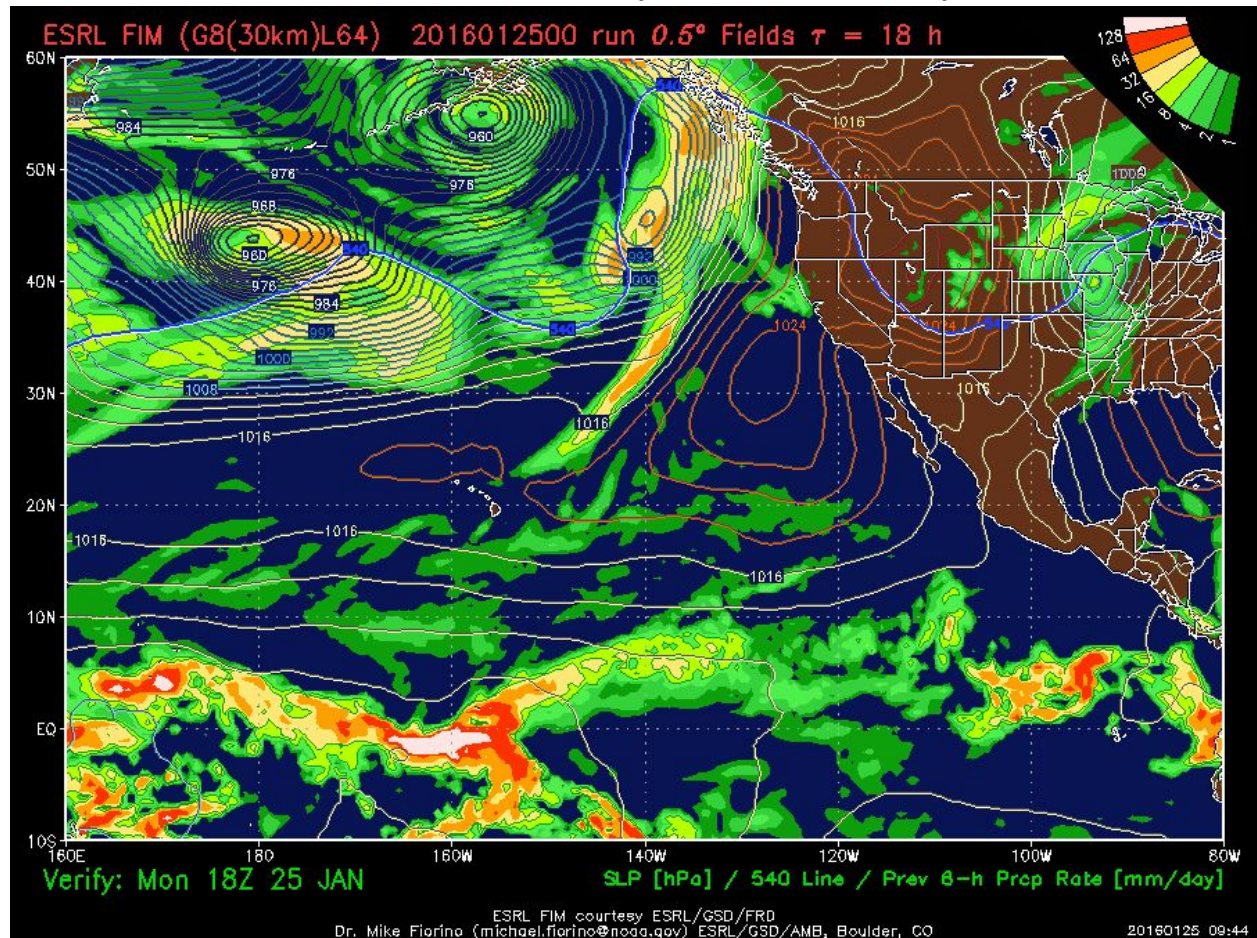


Short Term Fcsts Valid 18Z Mon Jan 26 (8AM Mon HNL Time)

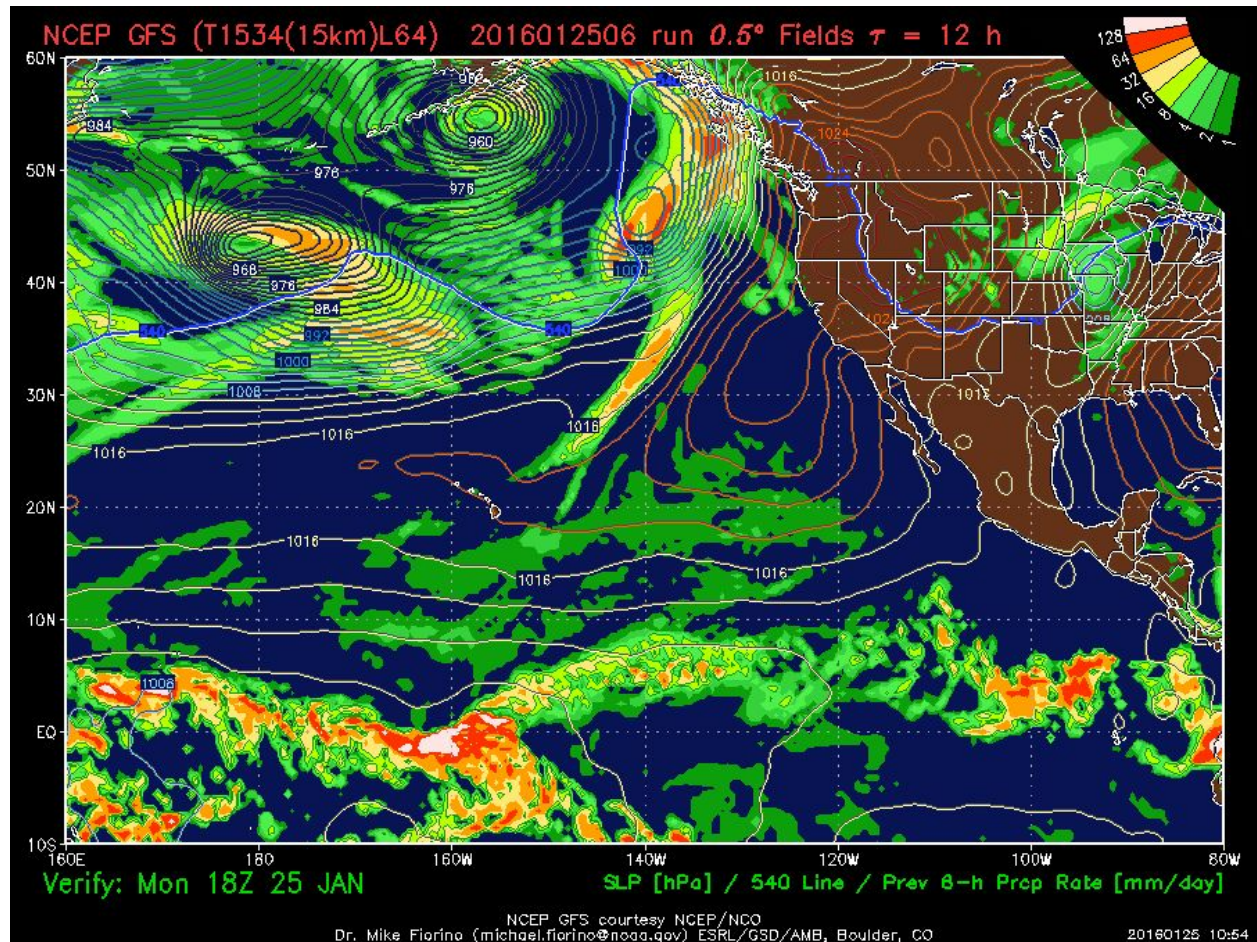
ECMWF 18HR Fcst for 18Z Mon 25 Jan (from 00Z Mon Run)



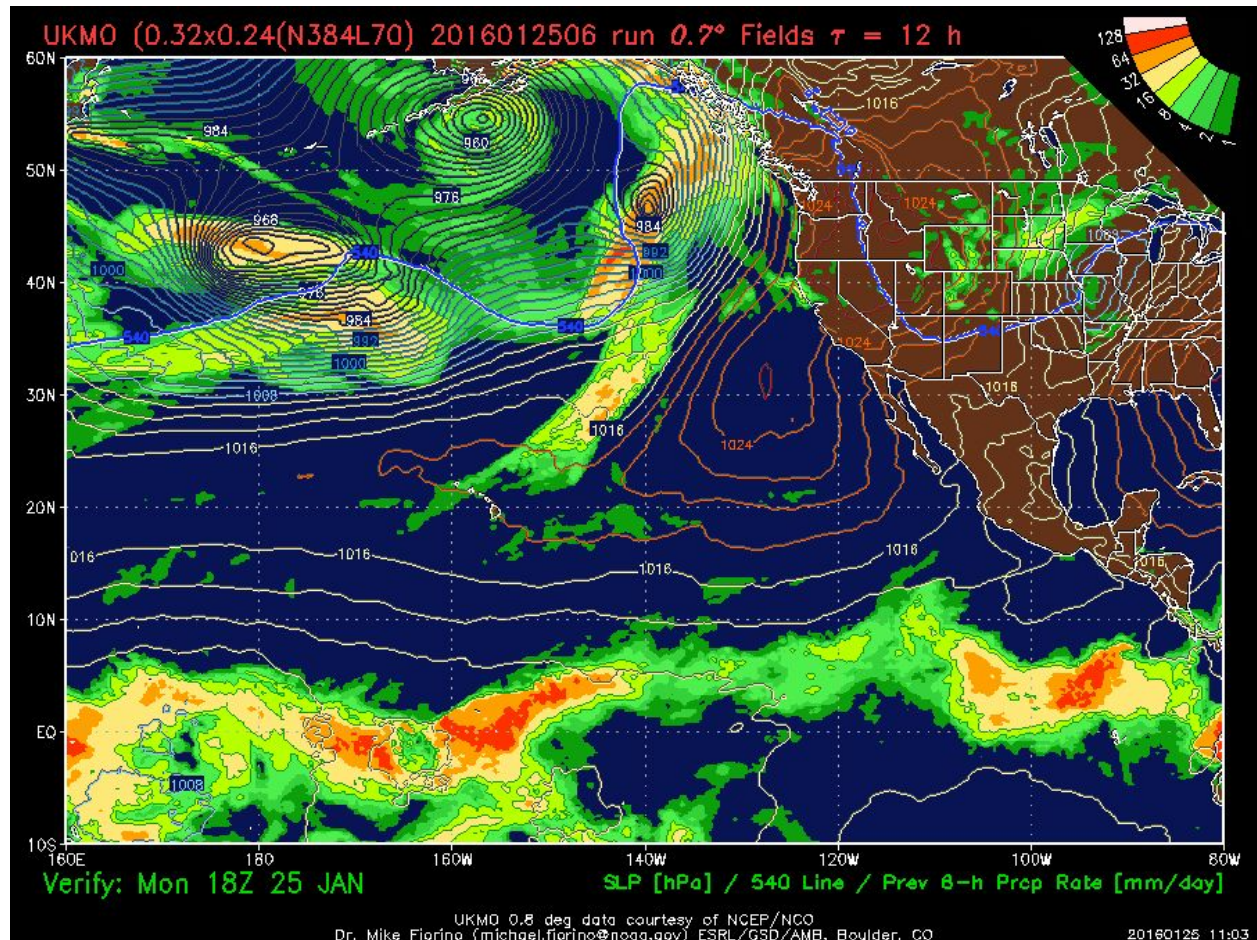
ESRL-FIM 18HR Fcst for 18Z Mon 25 Jan (from 00Z Mon Run)



NCEP GFS 12HR Fcst for 18Z Mon 25 Jan (from 06Z Mon Run)

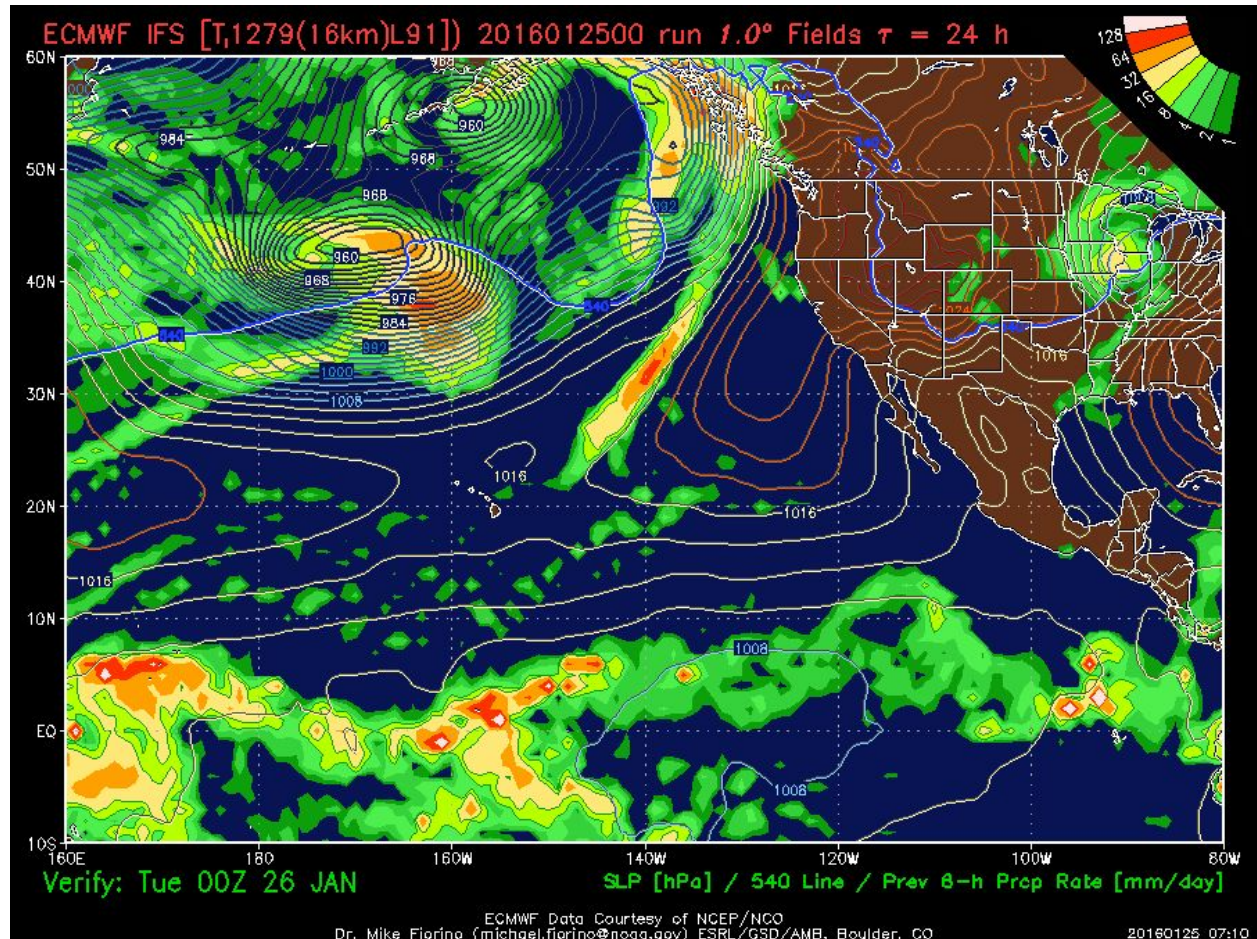


UKMO 12HR Fcst for 18Z Mon 25 Jan (from 06Z Mon Run)

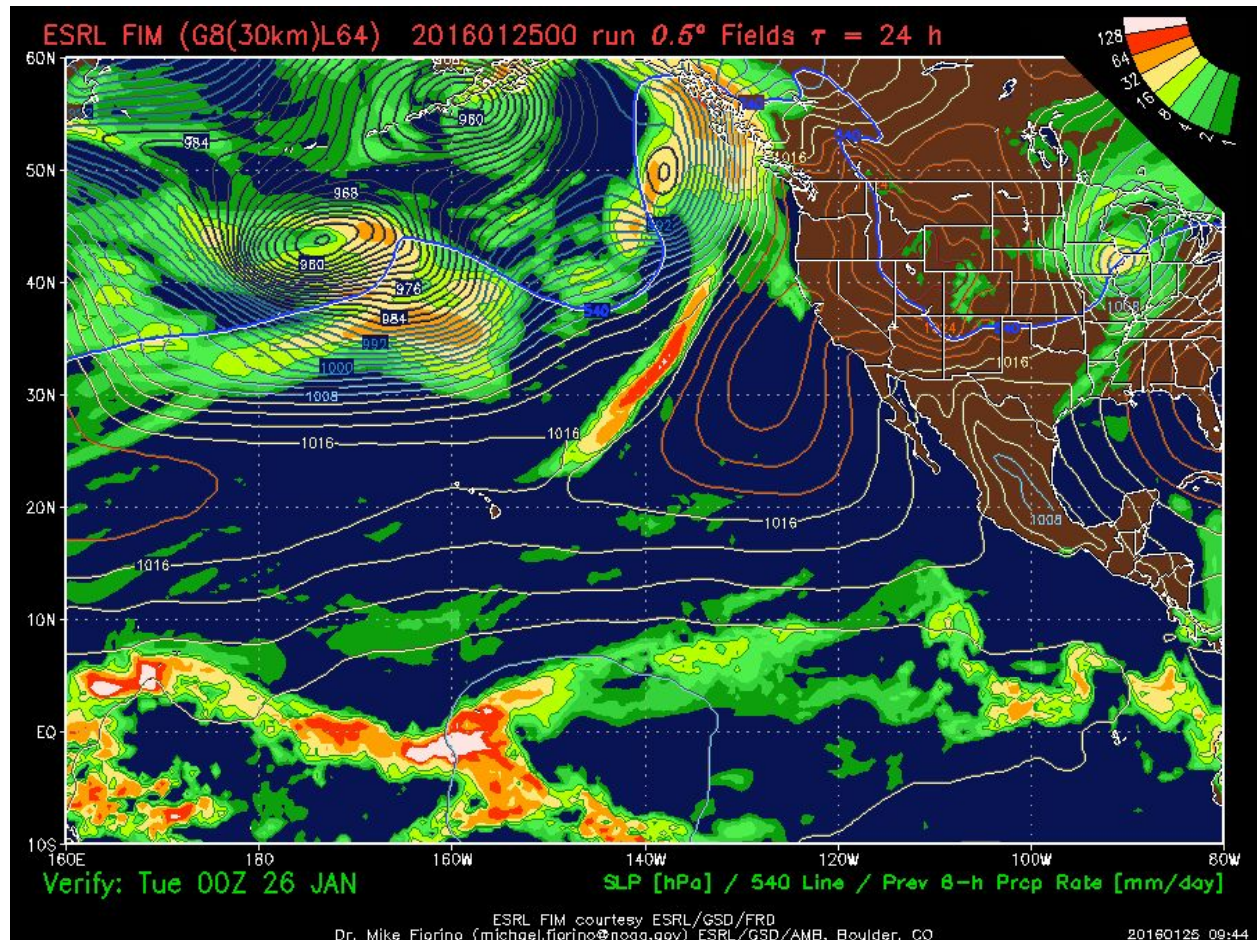


Short Term Fcsts Valid 00Z Tues Jan 26 (2PM Mon HNL Time)

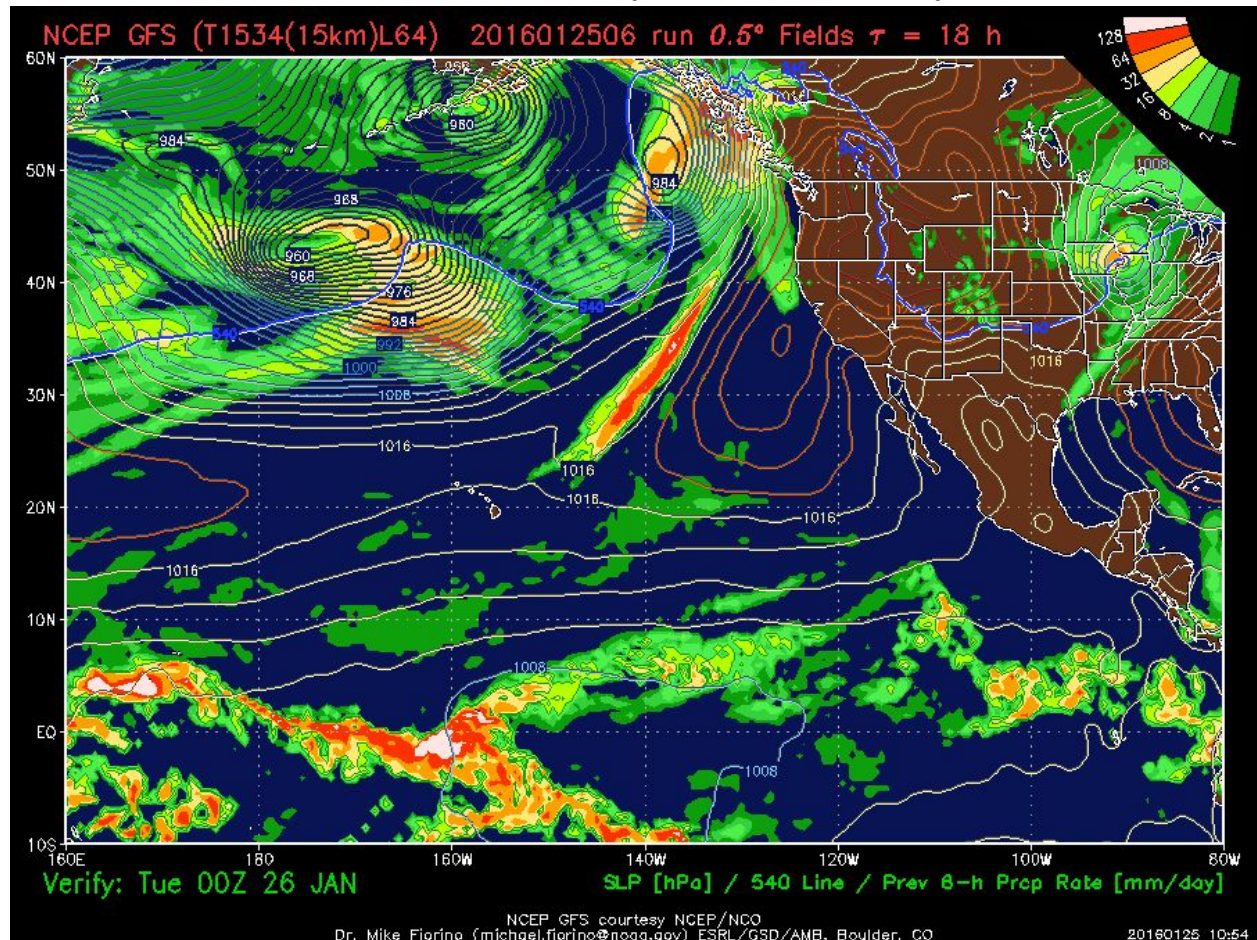
ECMWF 24HR Fcst for 00Z Tue 26 Jan (from 00Z Mon Run)



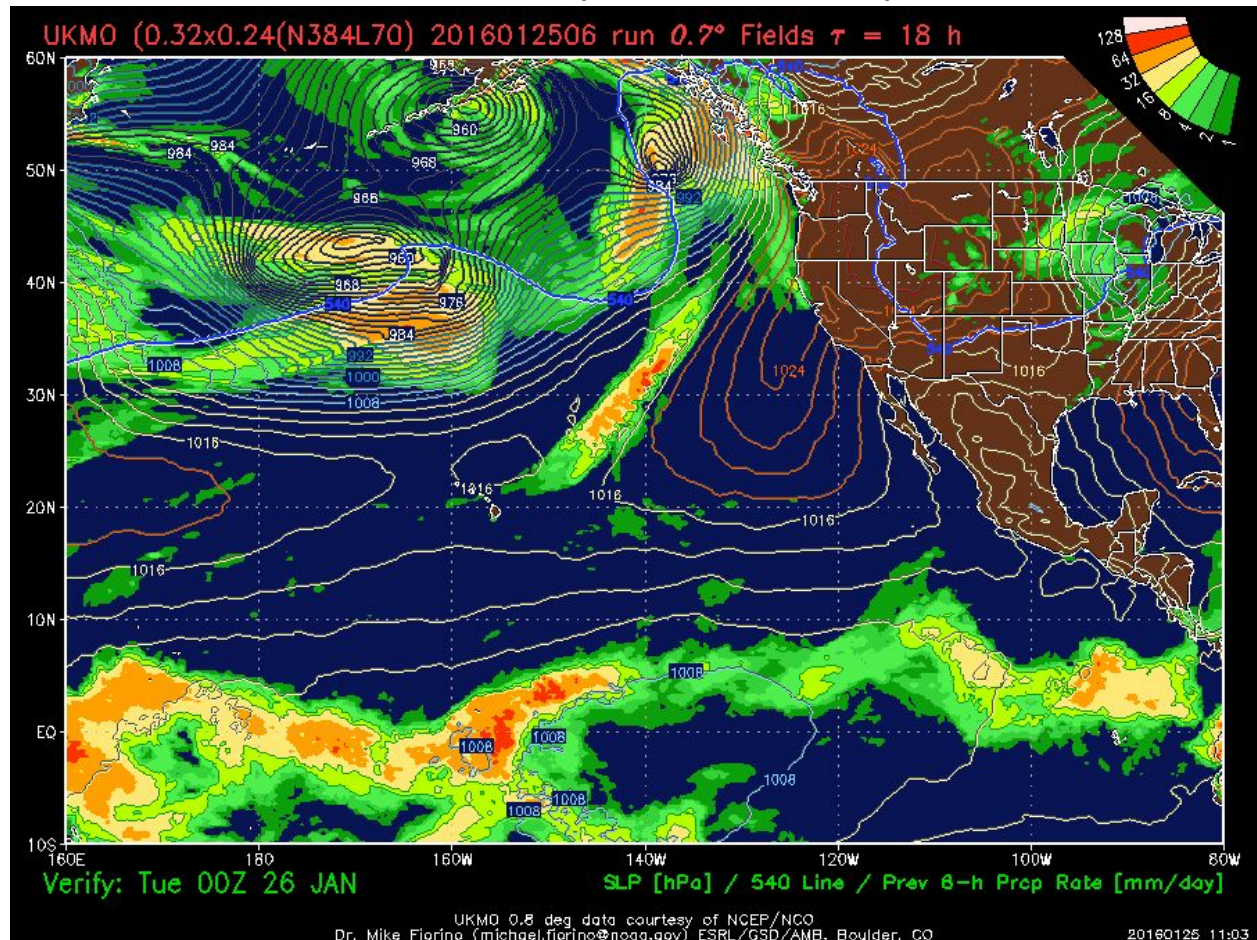
ESRL-FIM 24HR Fcst for 00Z Tue 26 Jan (from 00Z Mon Run)



NCEP-GFS 18HR Fcst for 00Z Tue 26 Jan (from 06Z Mon Run)

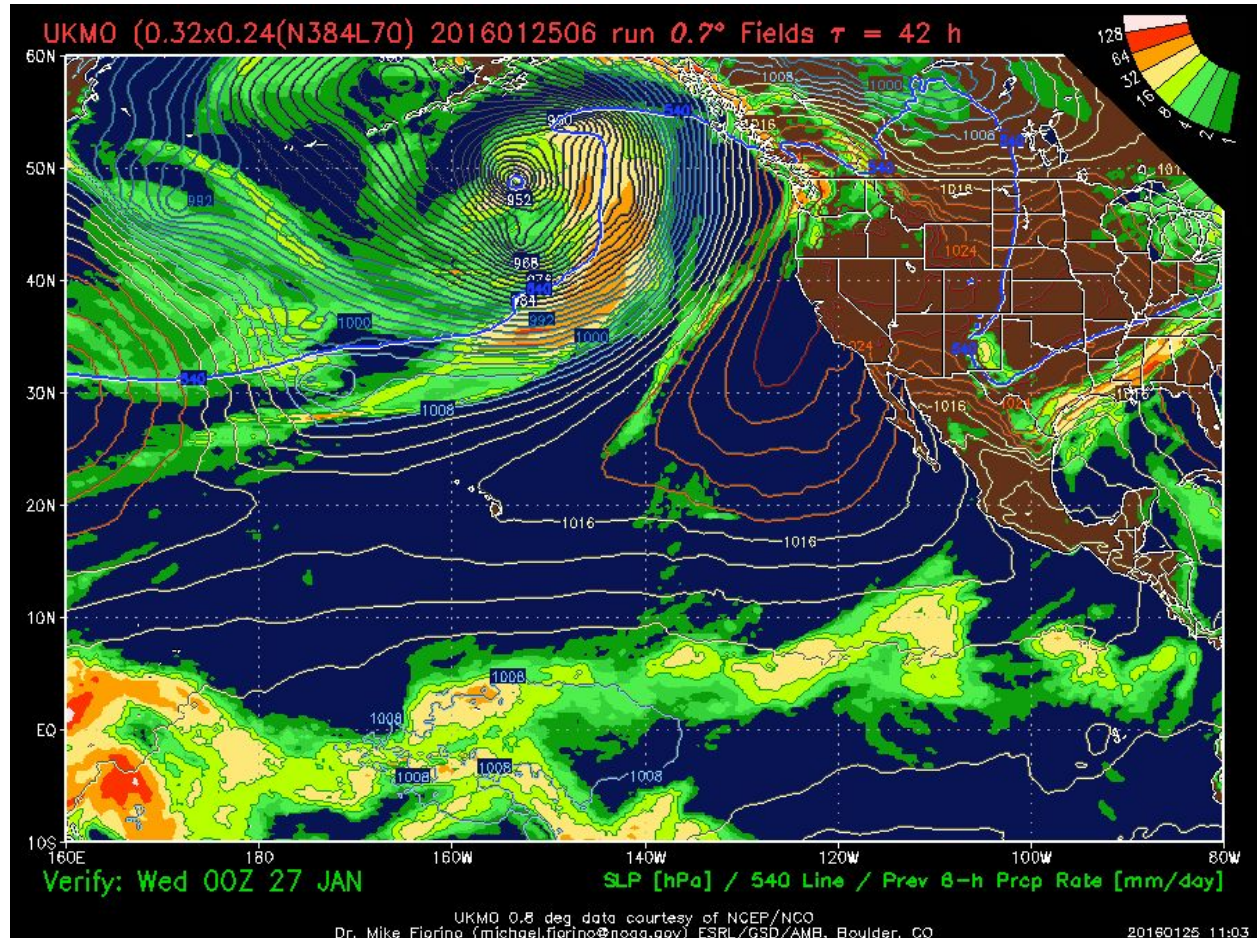


UKMO 18HR Fcst for 00Z Tue 26 Jan (from 06Z Mon Run)

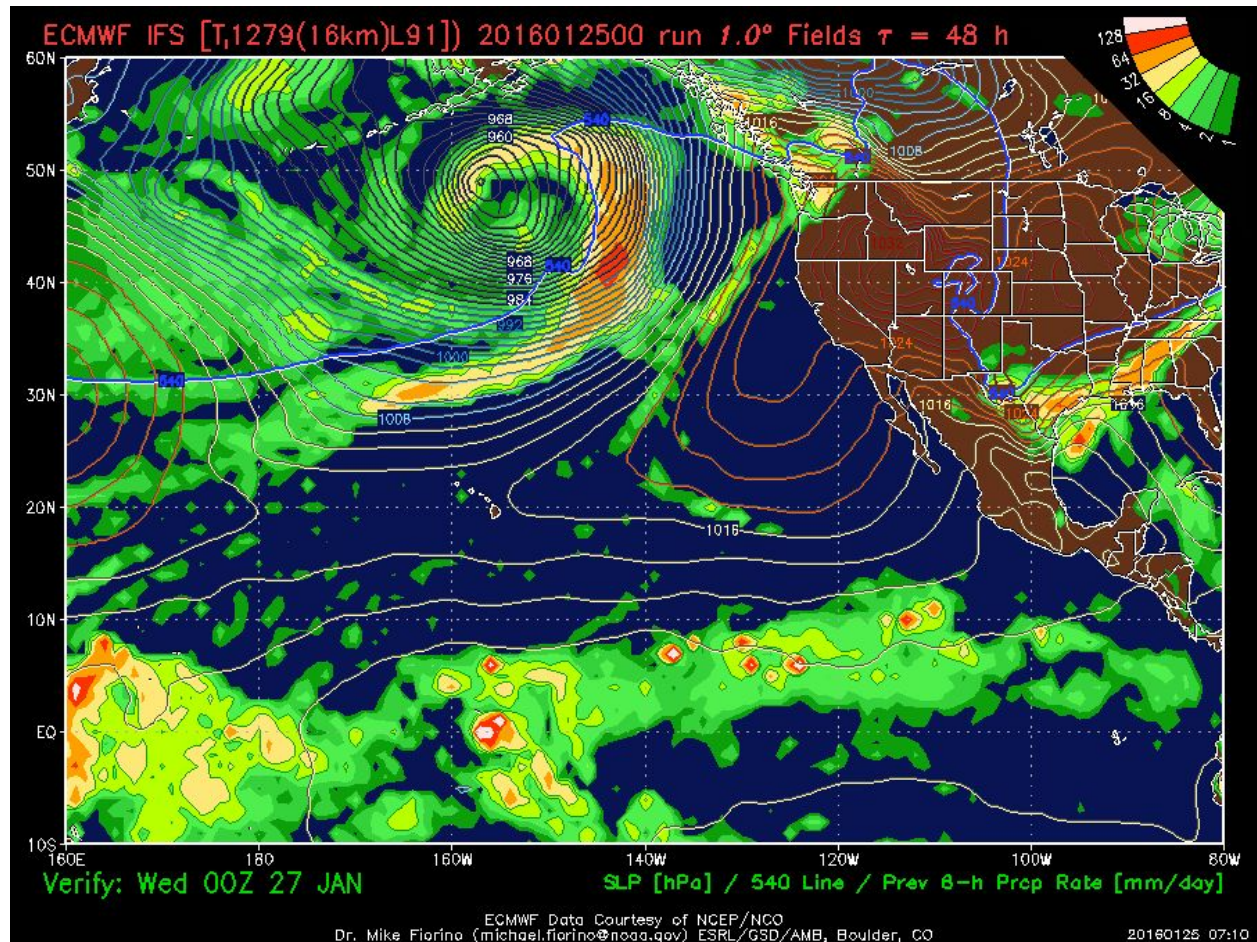


Short Term Fcsts Valid 00Z Wed Jan 27 (2PM Tues HNL Time)

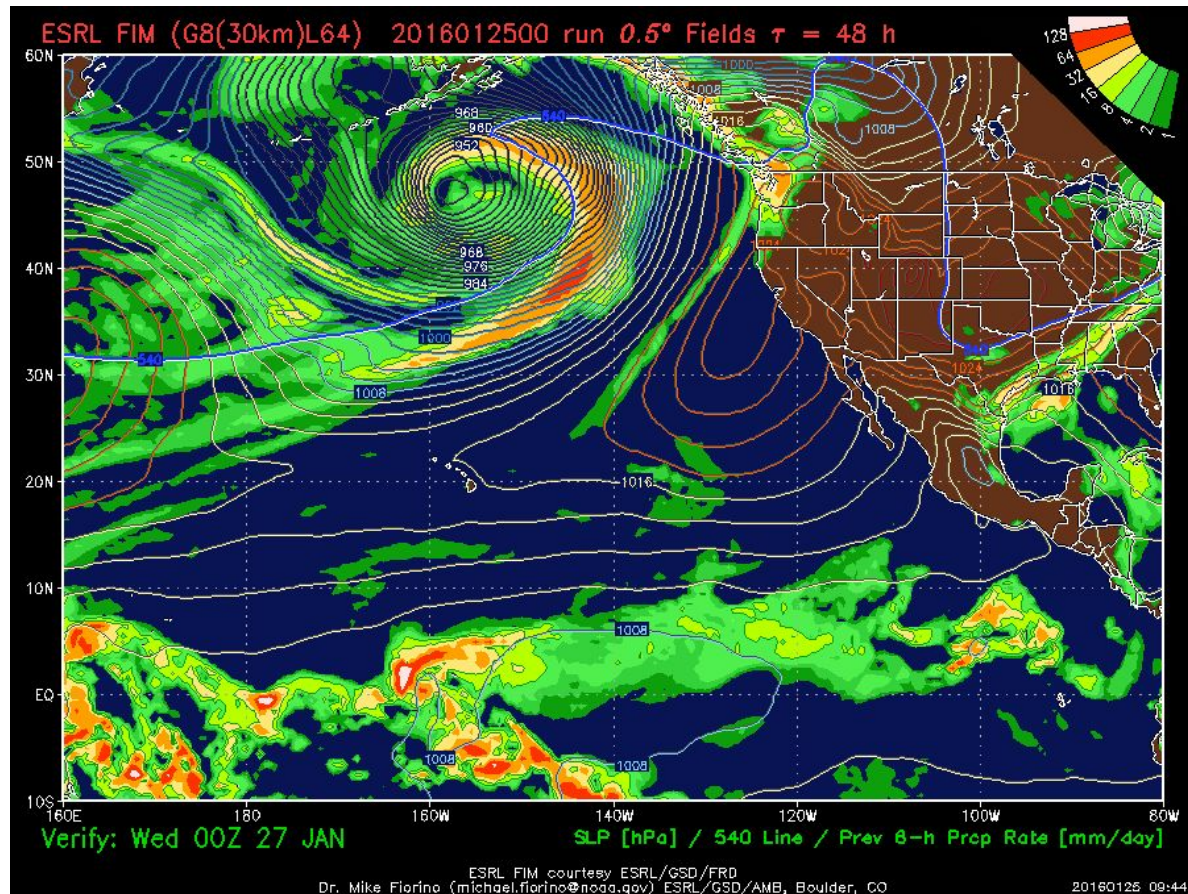
UKMO 42 HR Fcst for 00Z Wed 27 Jan (from 06Z Mon Run)



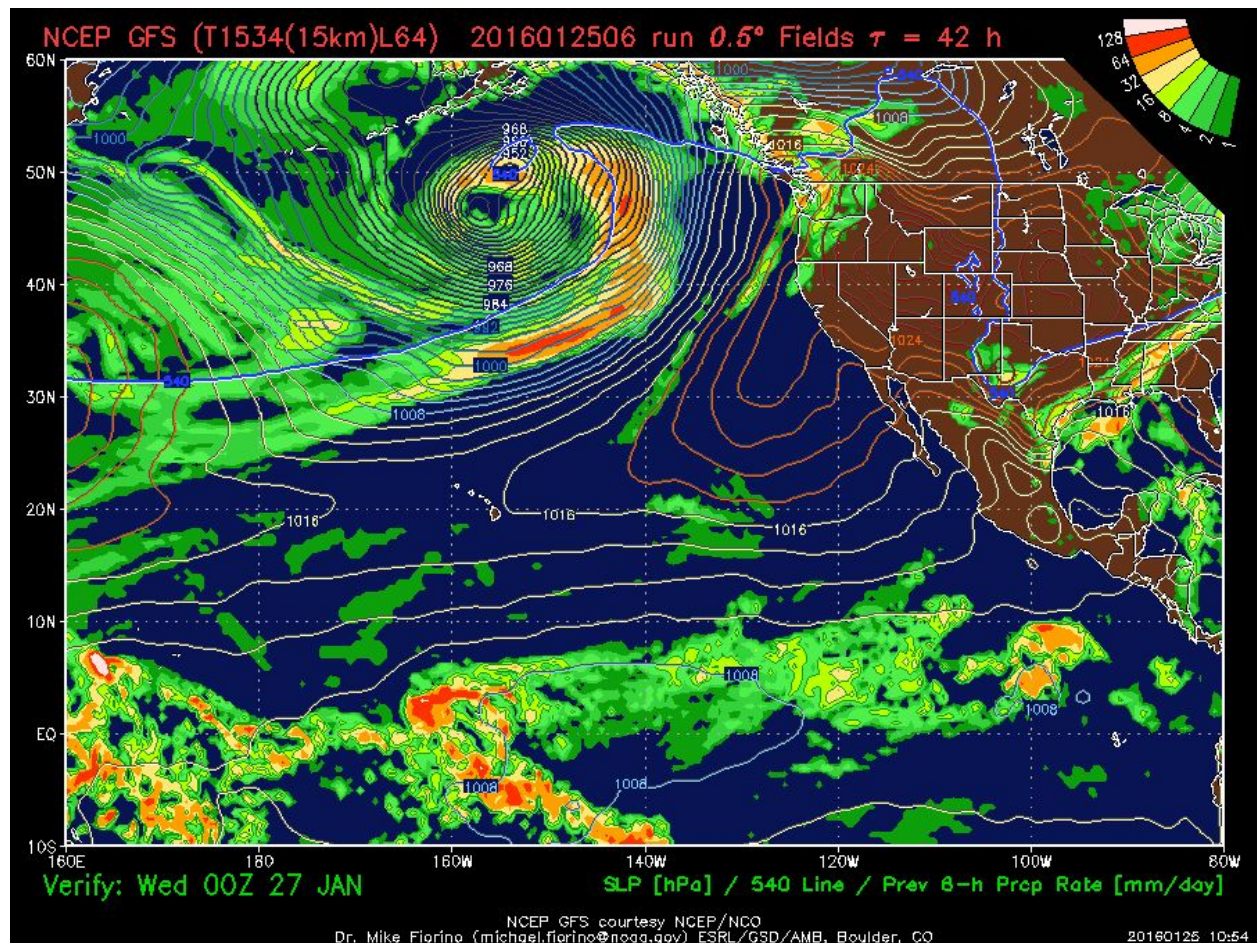
ECMWF 48 HR Fcst for 00Z Wed 27 Jan (from 00Z Mon Run)



ESRL-FIM 48 HR Fcst for 00Z Wed 27 Jan (from 00Z Mon Run)

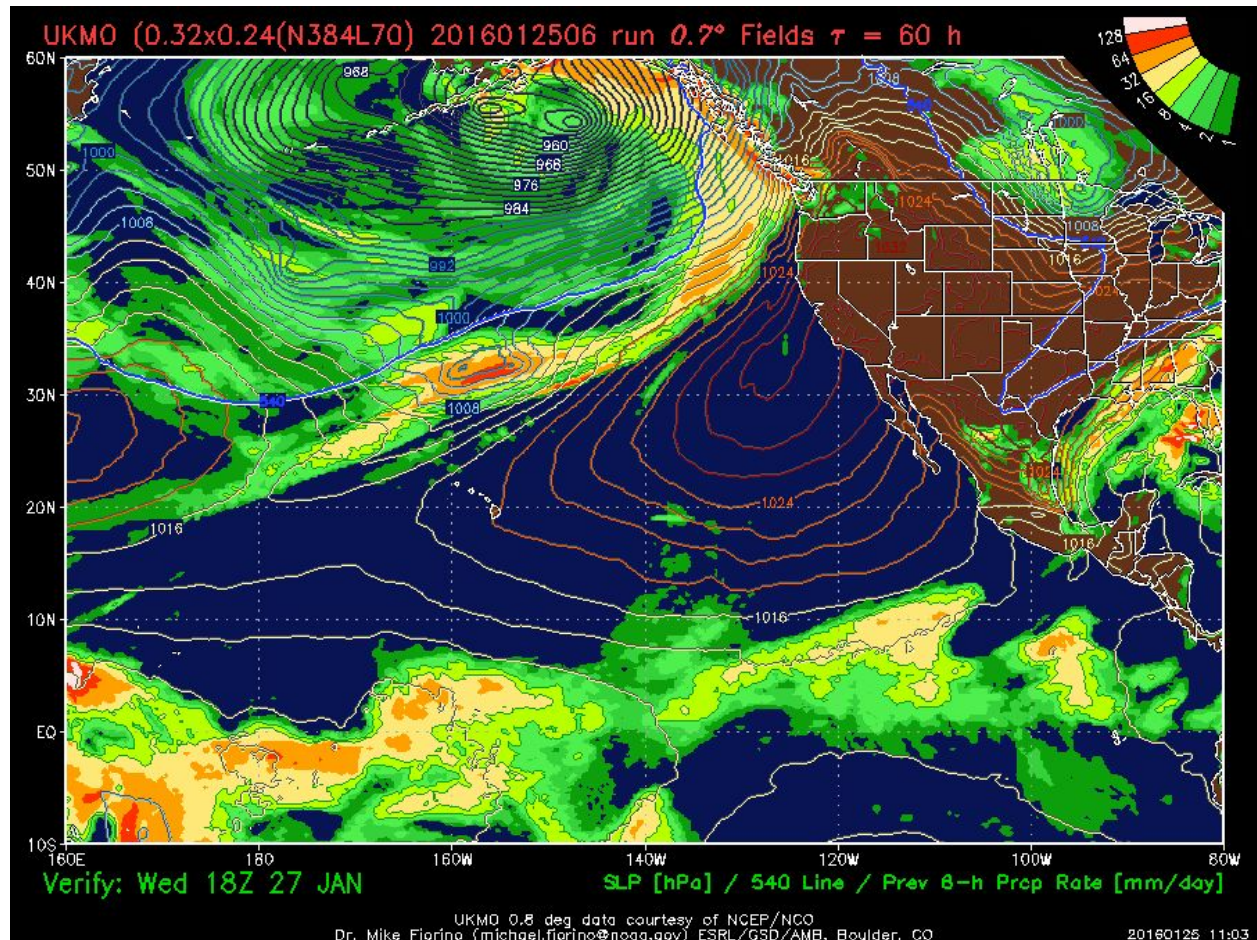


NCEP-GFS 48 HR Fcst for 00Z Wed 27 Jan (from 00Z Mon Run)

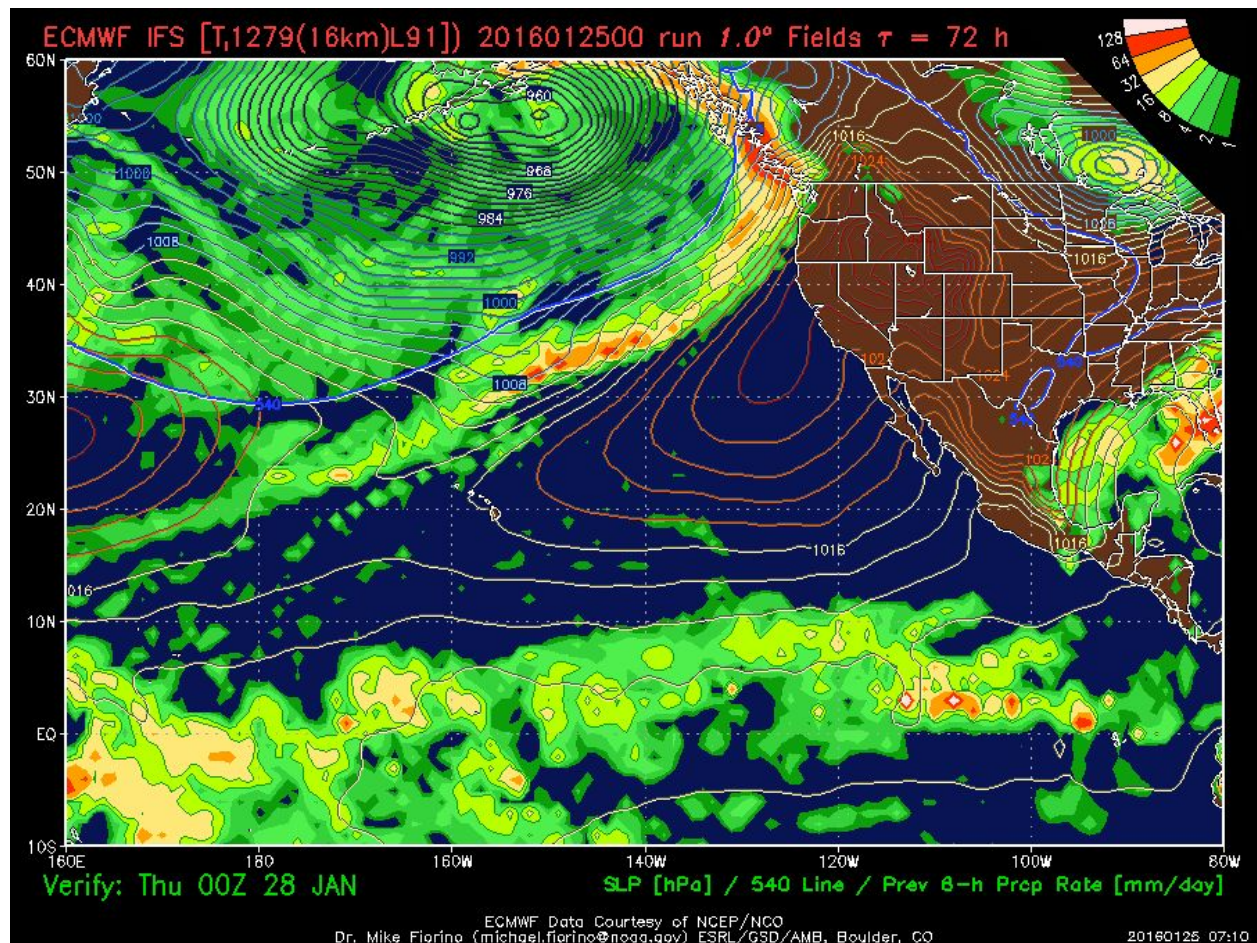


Short Term Fcsts Valid 18Z Wed Jan 27 (8AM Wed HNL Time)

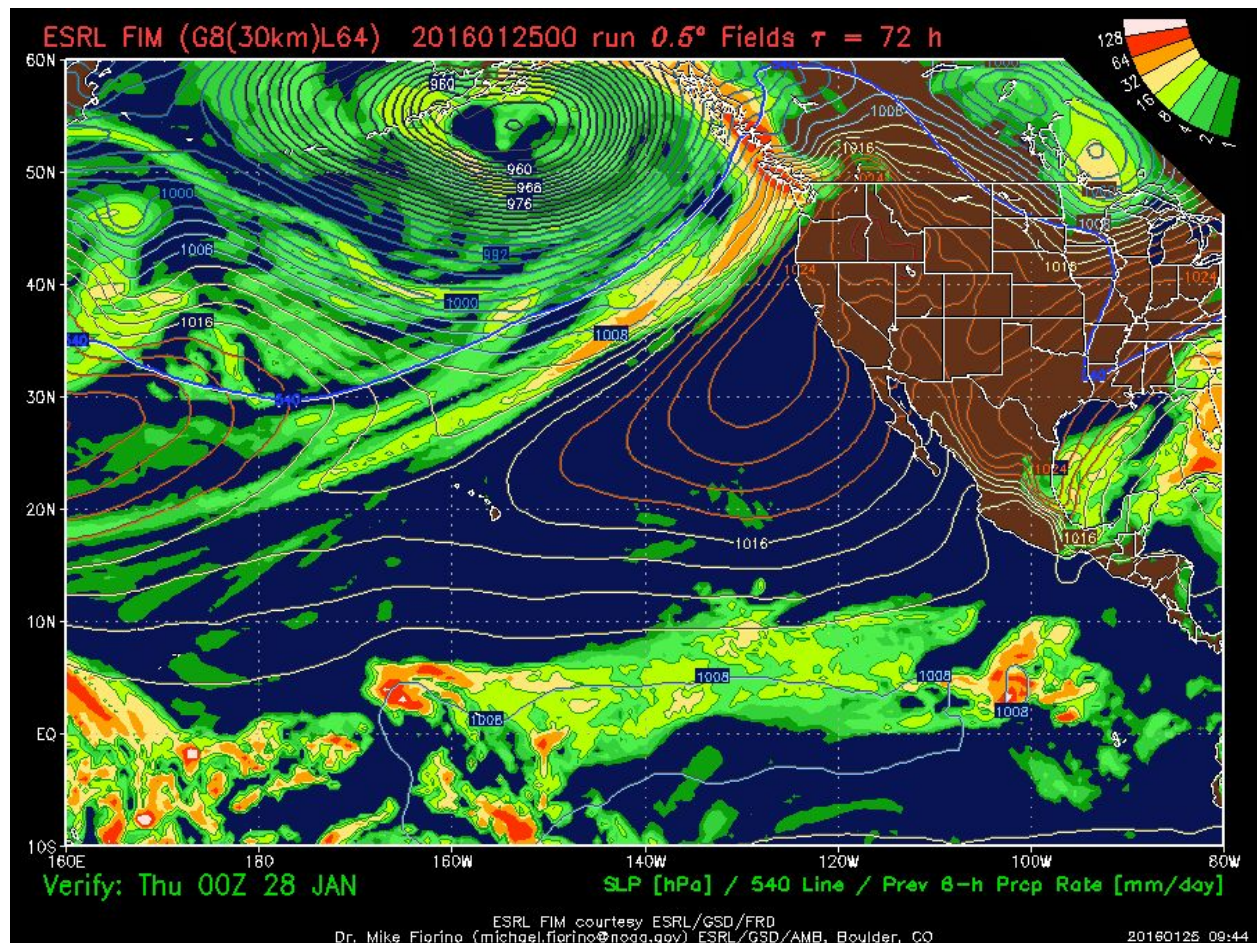
UKMO 60 HR Fcst for 18Z Wed 27 Jan (from 06Z Mon Run)



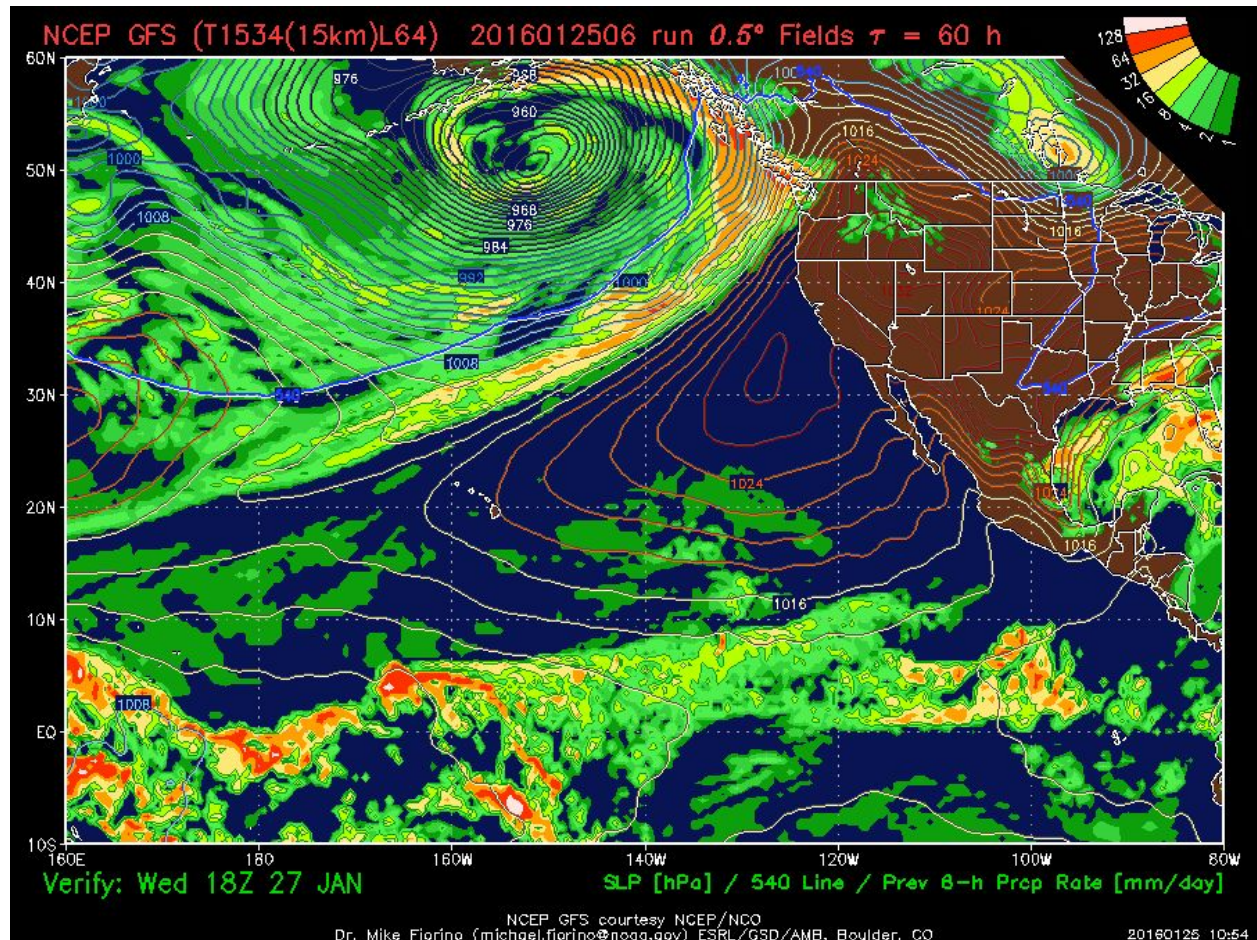
ECMWF 72 HR Fcst for 00Z Thu 28 Jan (from 00Z Mon Run)



ESRL_FIM 72 HR Fcst for 00Z Thu 28 Jan (from 00Z Mon Run)



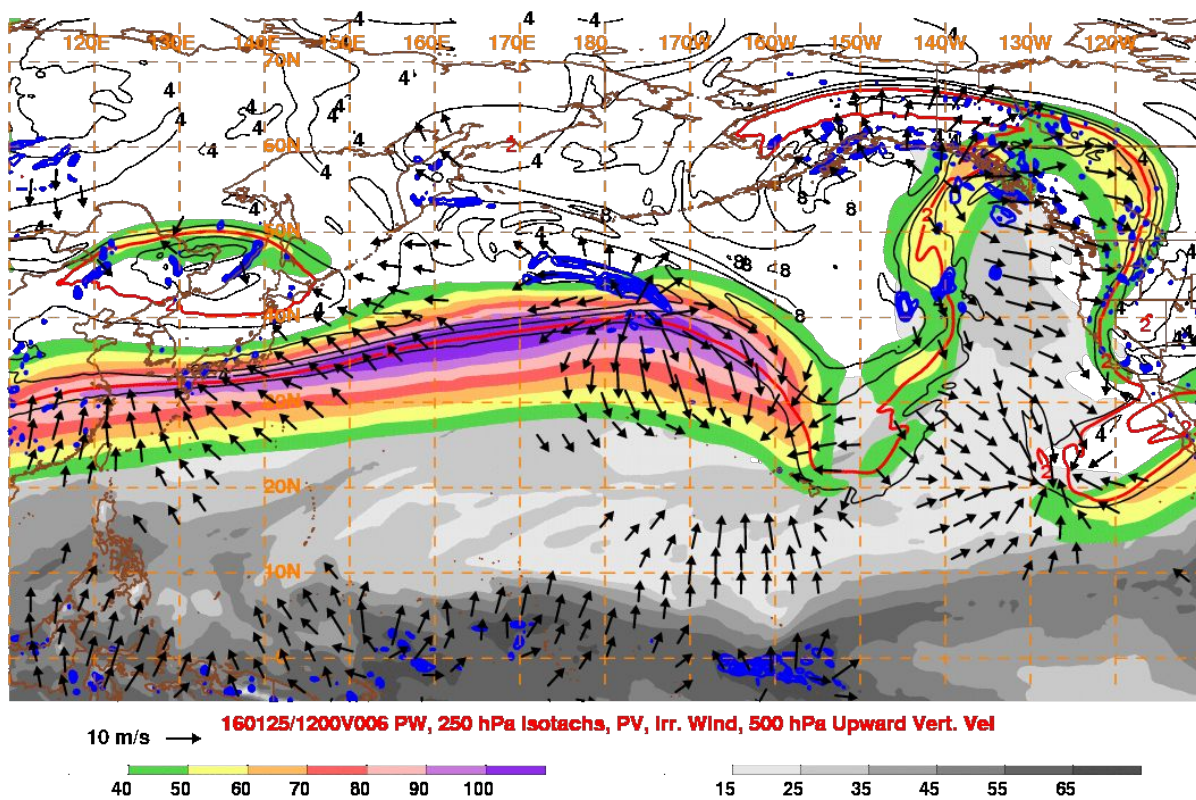
NCEP GFS 60 HR Fcst for 18Z Wed 27 Jan (from 06Z Mon Run)



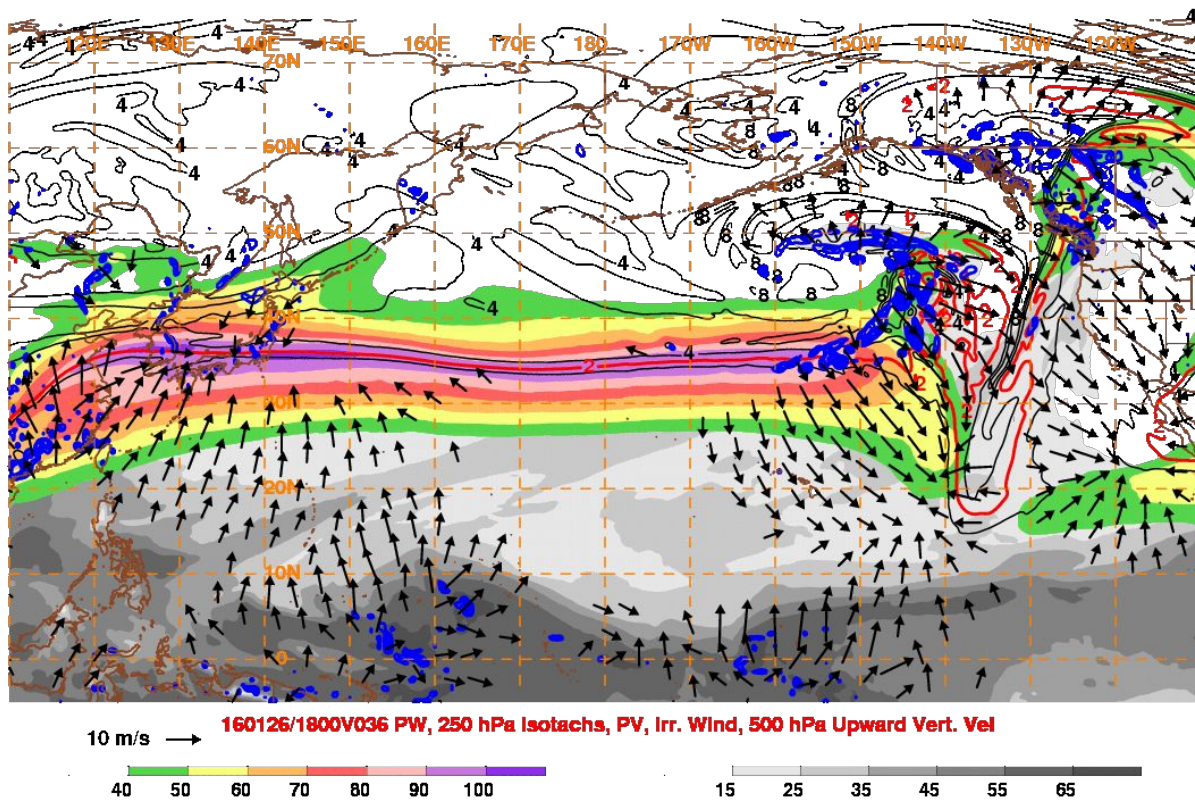
GFS 18-hr Fcst Valid 00Z 25 January Monday (2PM HT Sunday)

From Latest Initialization of GFS (06Z MON 25 Jan)

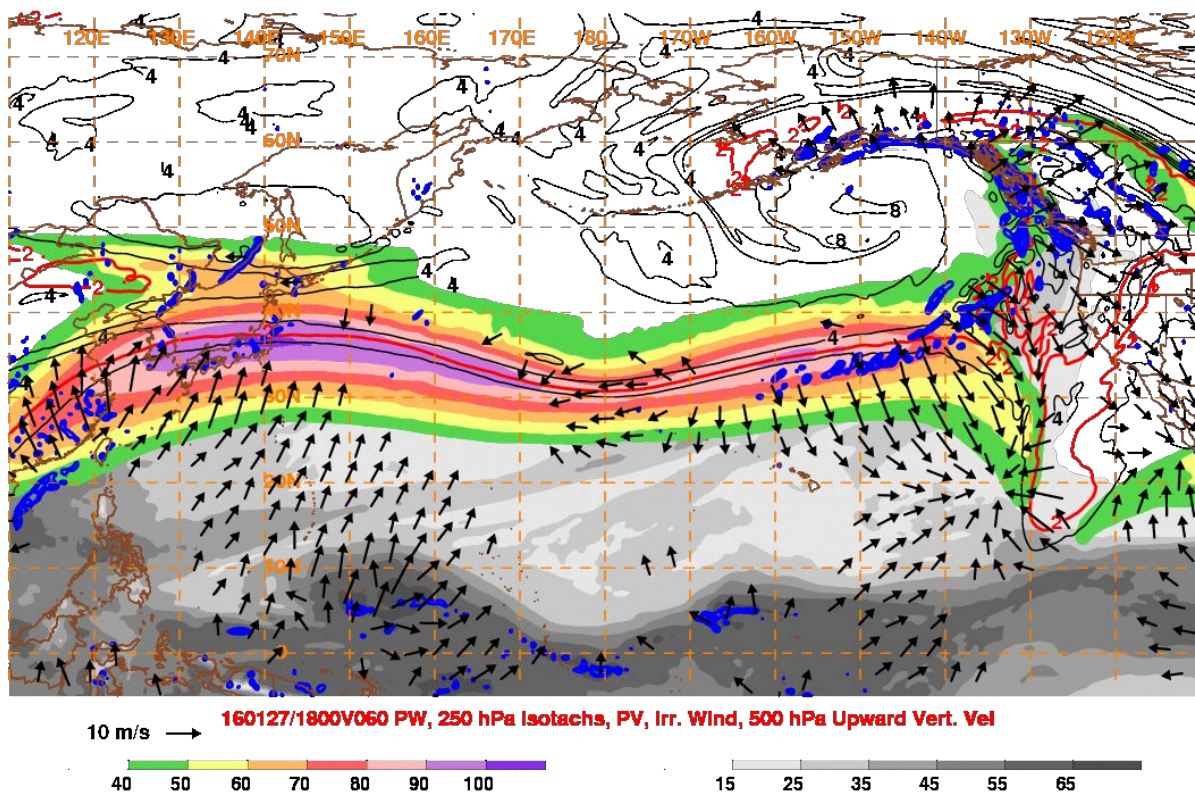
GFS 6-hr Fcst Valid 12Z 25 January Monday (8am local HT Monday)



GFS 36-hr Fcst Valid 18Z 26 January Tues (8AM local HNL TUES)

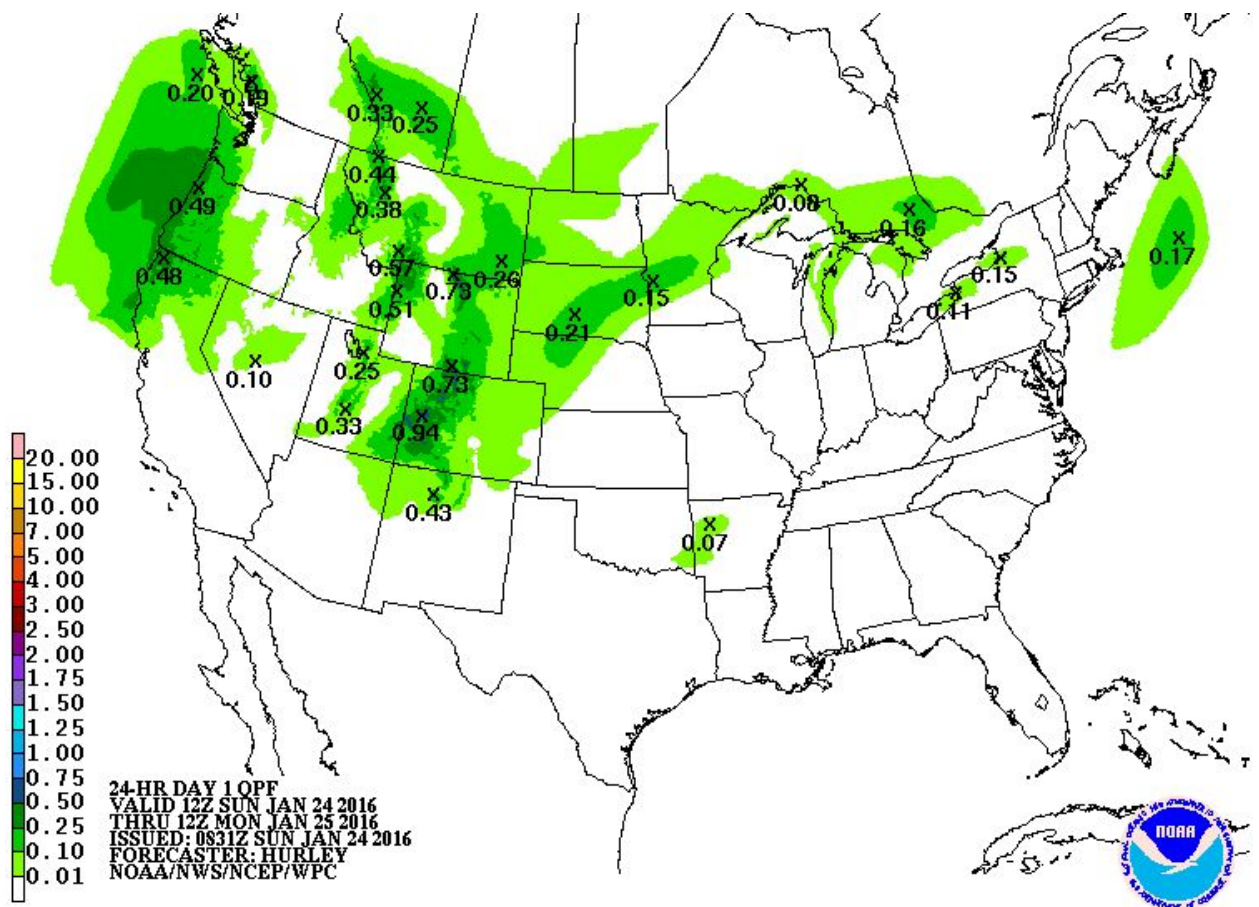


GFS 60-hr Fcst Valid 18Z 27 January WED (8am local HNLH WED)



Short Range NWS Official Outlook

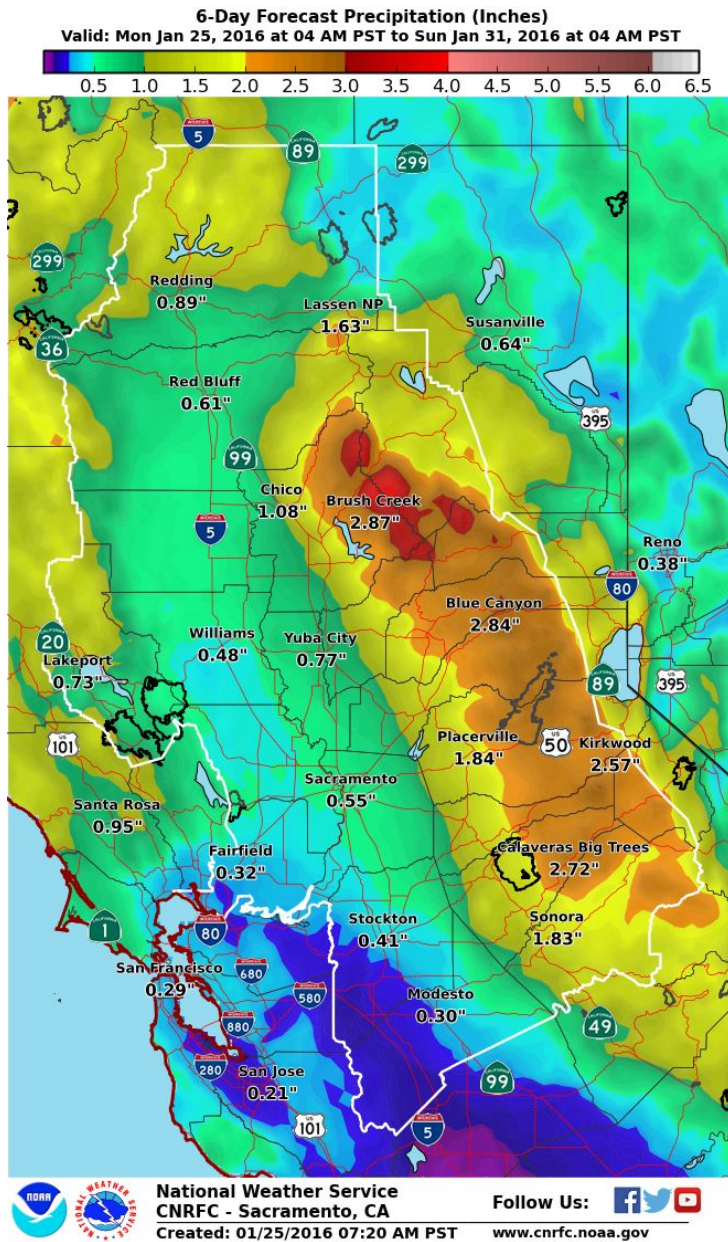
NOAA Weather Prediction Center 24-hr Pcpn Total: 12Z Sun- 12Z Mon Jan 25



Short Range NWS Official US Outlook

NOAA Weather Prediction Center 48-hr Outlook: Valid 12Z Wed Jan 27

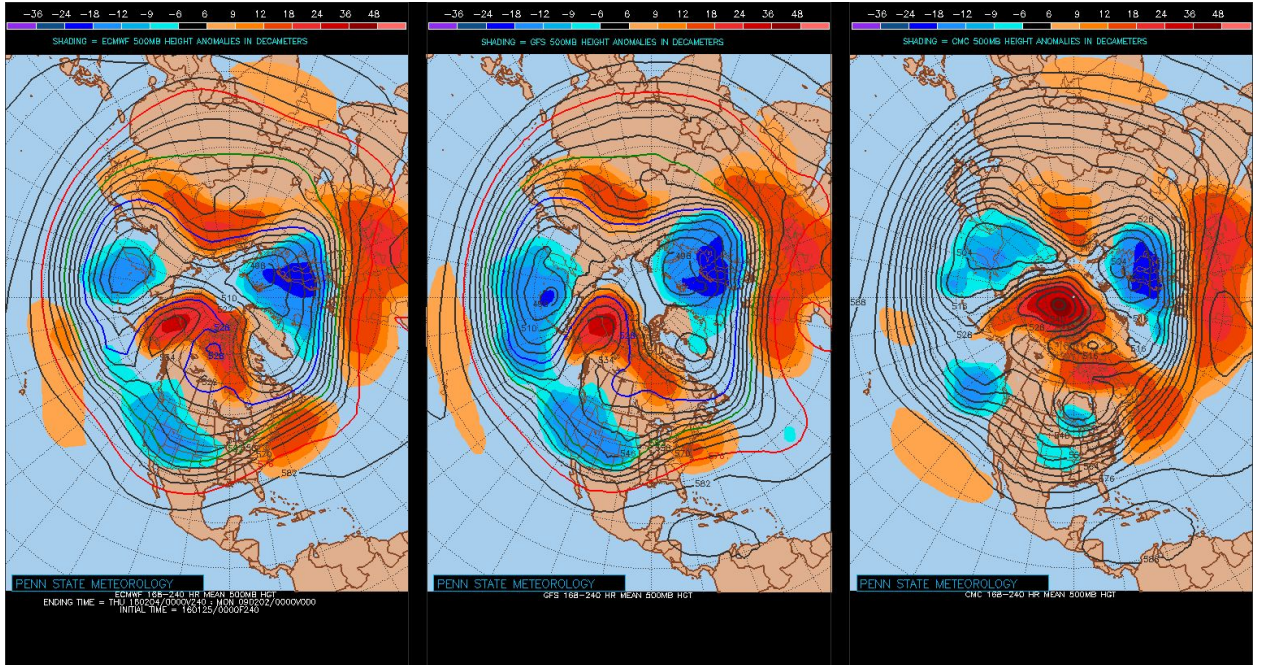




Medium - Long Range Forecast

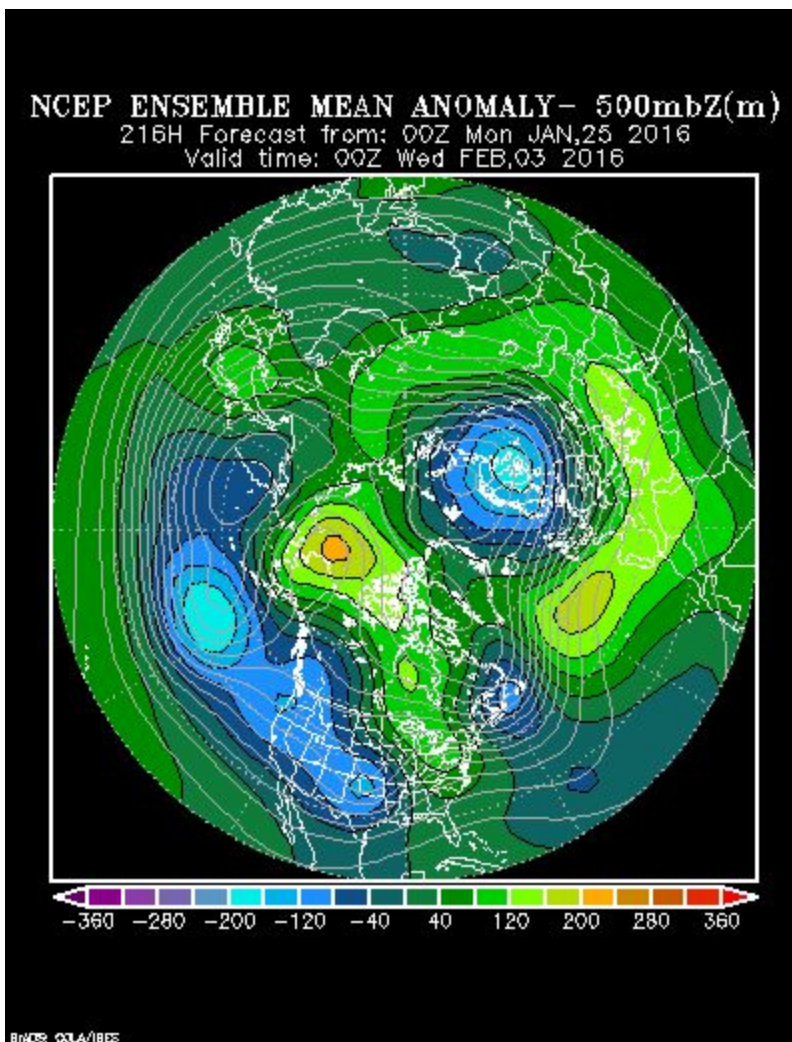
3 Model Intercomparison Deterministic Fcsts of 500Z/anomalies :

Day 7-10 Mean/anomalies (from 00Z MON 25 Jan initializations)



Day 9 Ensemble Mean 500Z Forecast

NCEP GEFS Ensemble 500 mb Height and Anomalies Valid OOO Feb 3
(216 Hr Fcst)

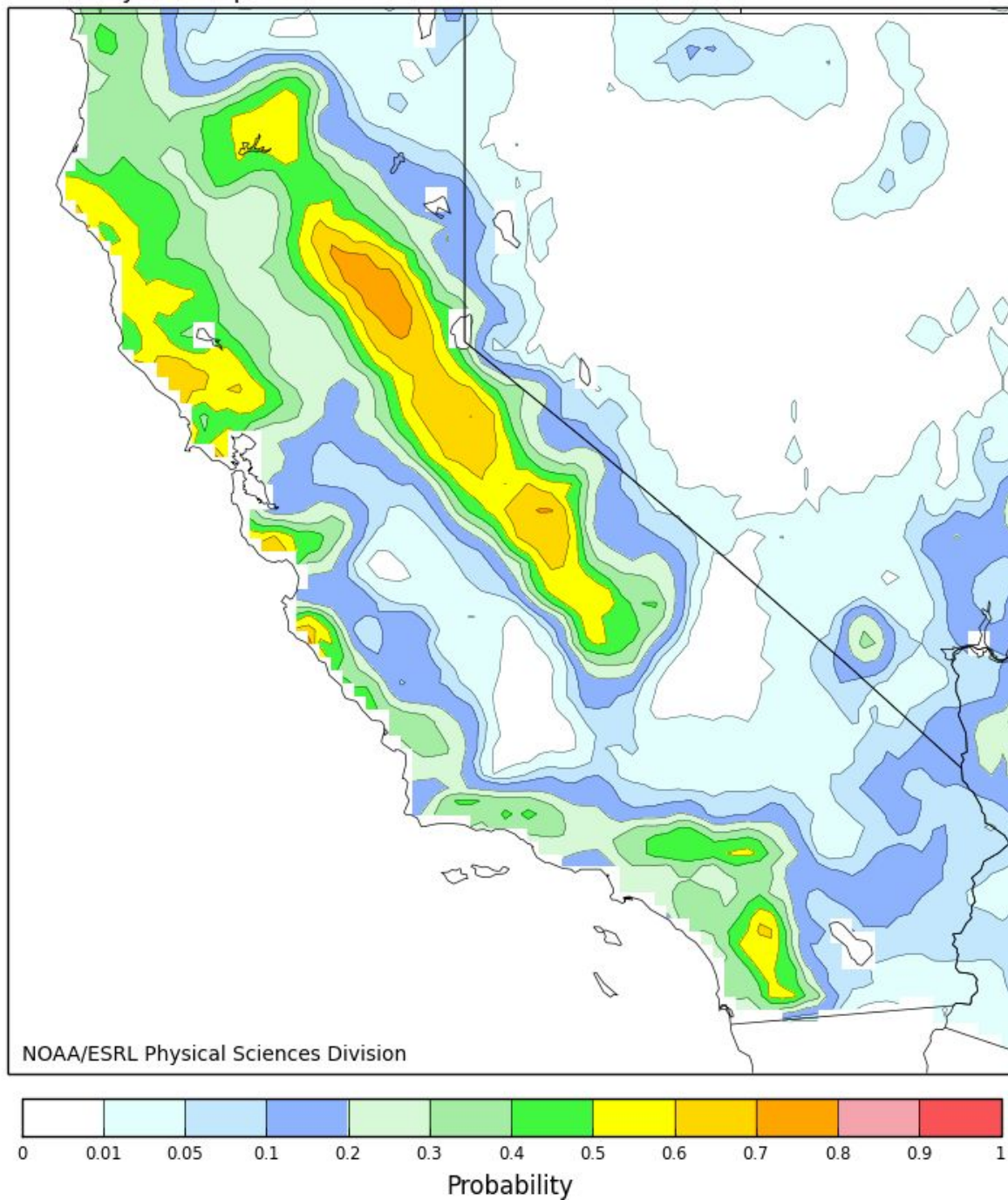


ESRL-Calibrated Reforecast Pcpn :

Day 6-10 Fcst for 00z 29 January -00z Wed February 3

(from the 00Z MON 24 JAN ensembles of the experimental reforecast system)

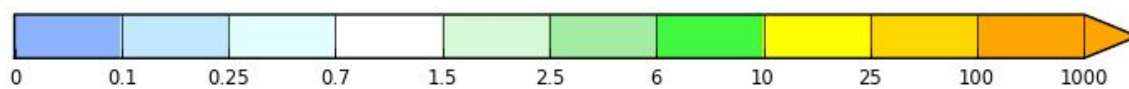
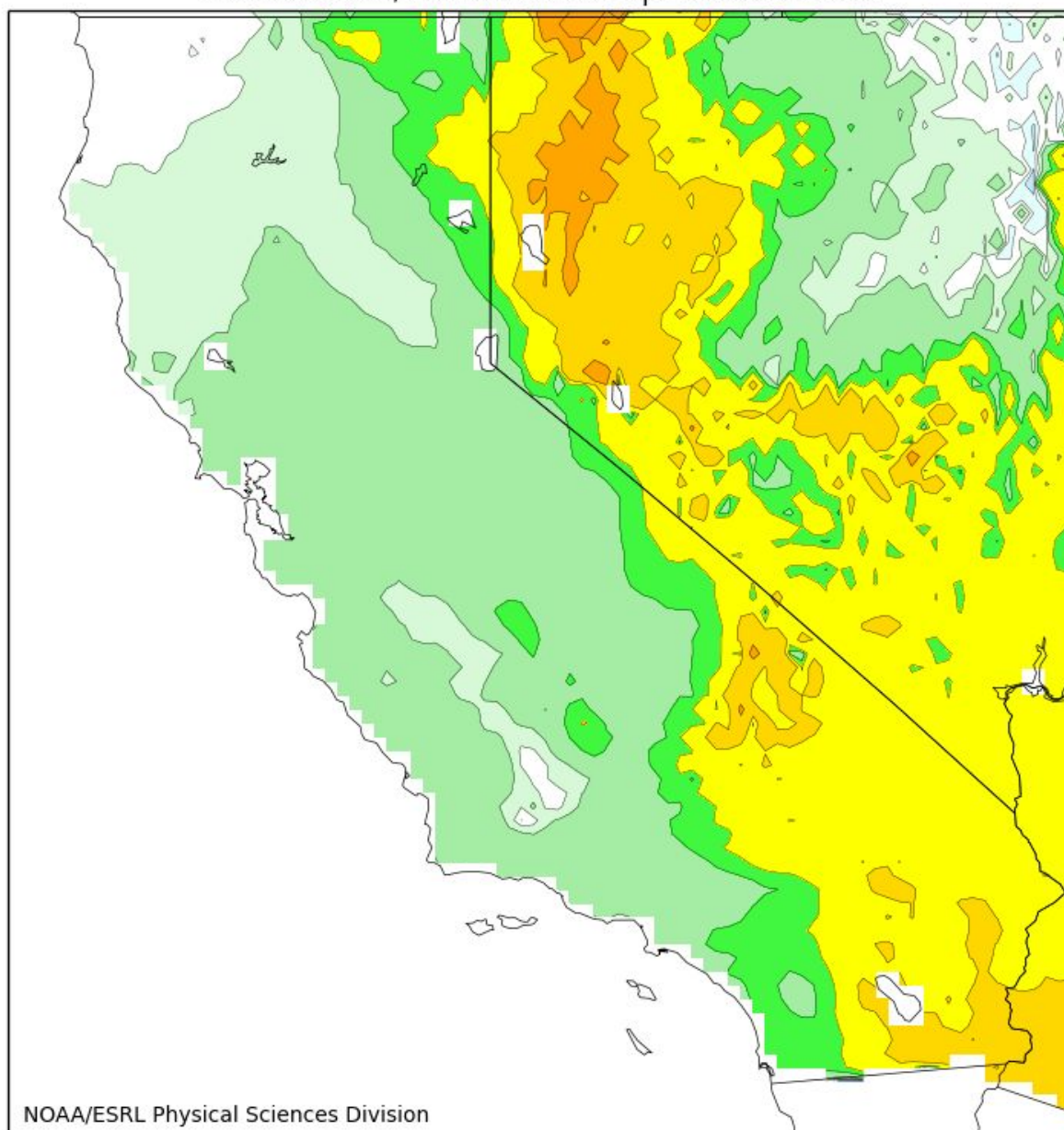
120-240hr fcst from 00Z Mon Jan 25. Valid 00Z Sat Jan 30 - 00Z Thu Feb 04
Probability of Precip > 50mm. CSGD. 2002-2013 CCPA and Reforecast2 Calibration.



ESRL-Calibrated Reforecast Fractional Change in % Compared to Climo :
Day 6-10 Fcst for 00zFrid -00z Wed February 3

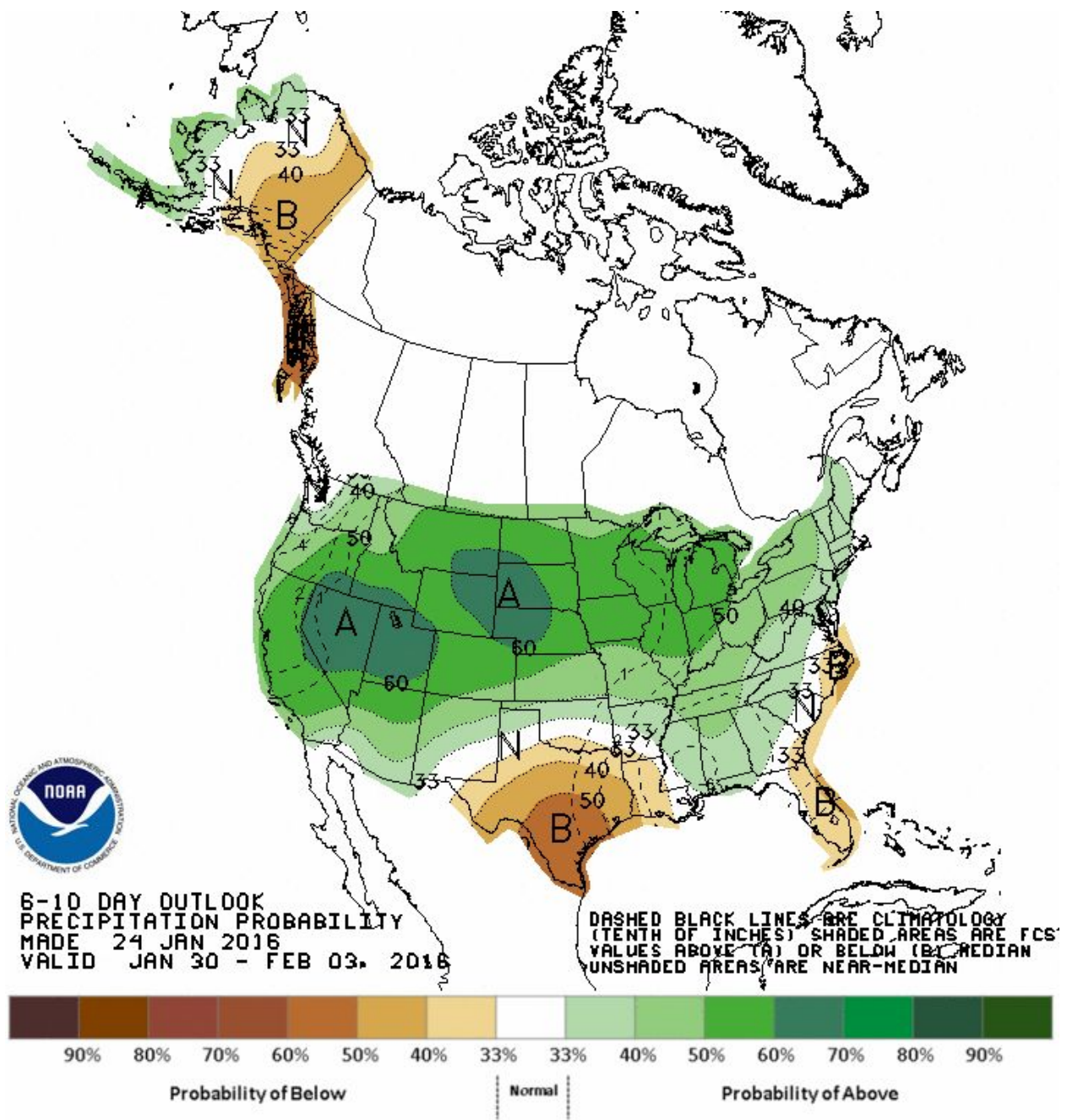
(from the 00Z MON ensembles of the experimental reforecast system)

120-240hr fcst from 00Z Mon Jan 25. Valid 00Z Sat Jan 30 - 00Z Thu Feb 04
Ratio. Forecast/Climo Prob of Precip > 50mm. CSGD.

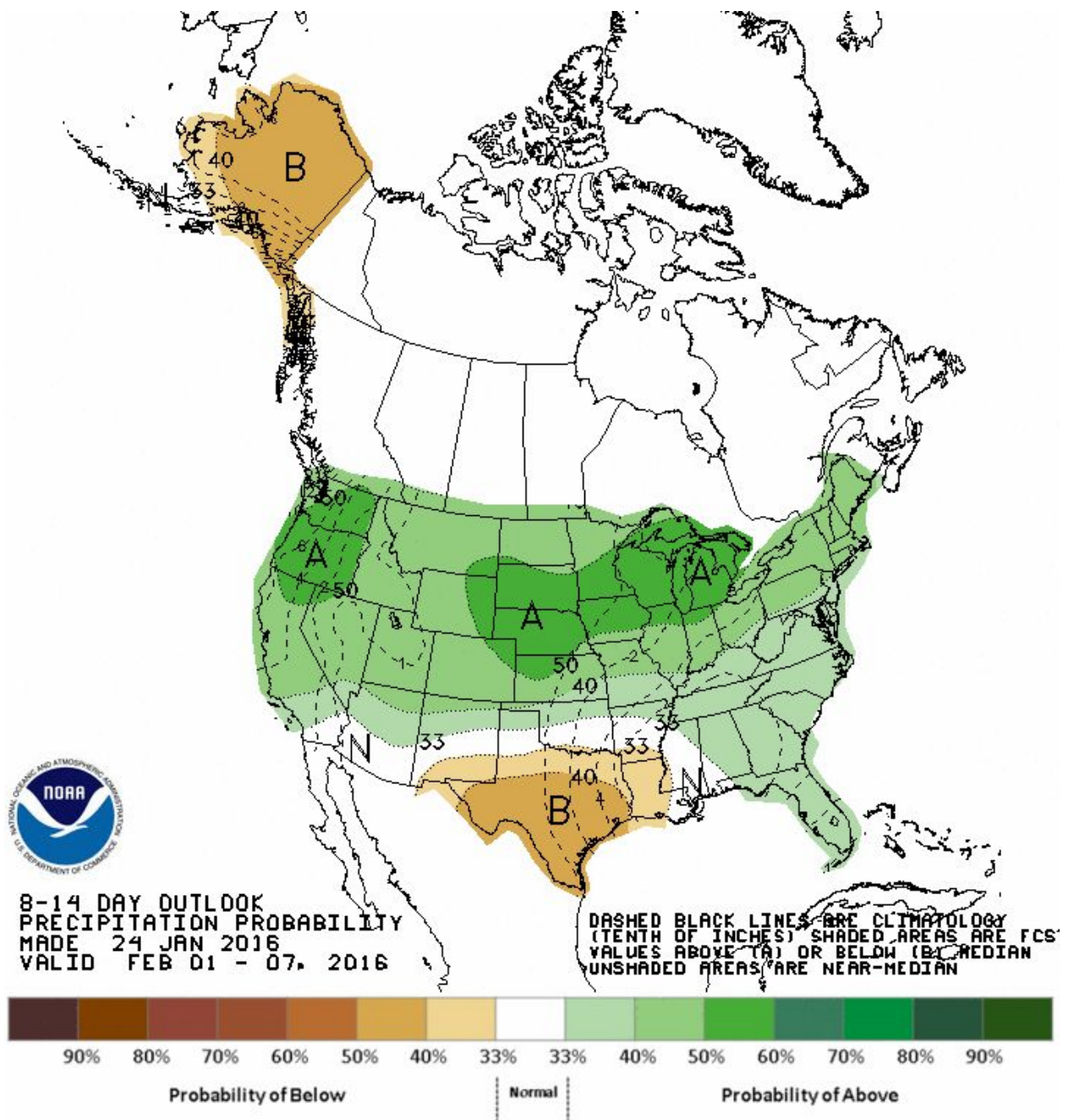


Ratio: Forecast Probability / Climatological Probability

CPC 6-10 Day Pcpn Outlook Valid 30 Jan - 03 Feb 2016

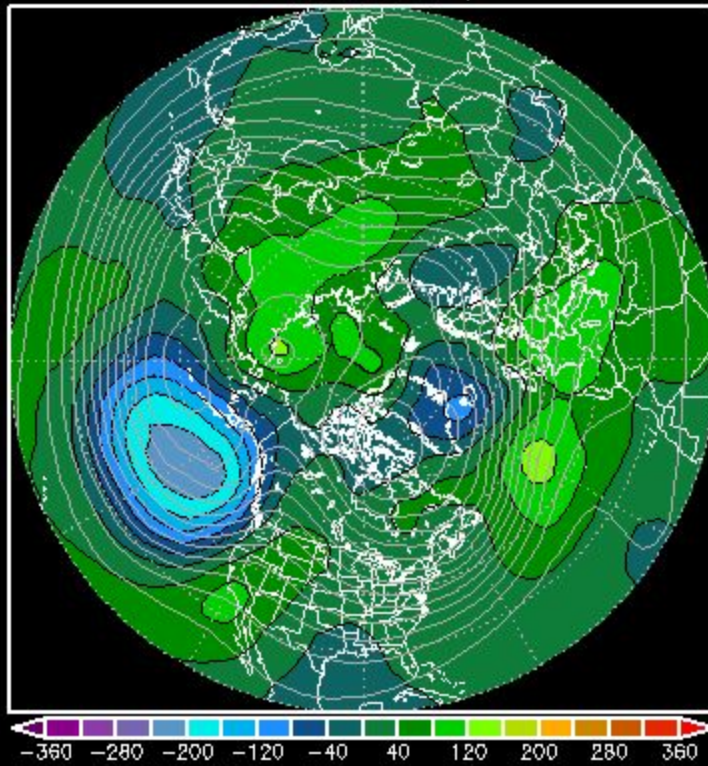


CPC 8-14 Day Pcpn Outlook Valid 30 Jan - 03 Feb 2016



360 Hr Fcst Ensemble Mean 500 Z Anom : Valid 8 Feb 2016

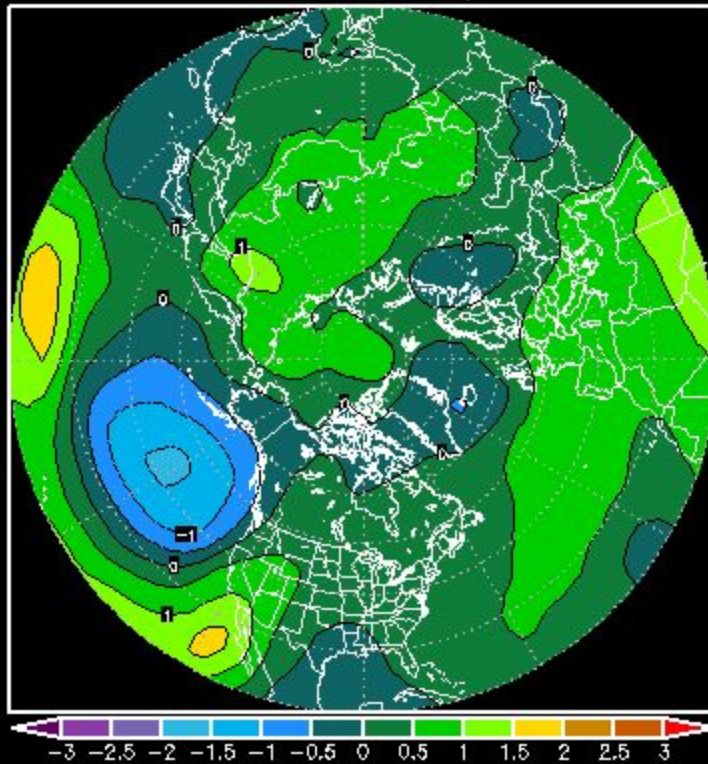
NCEP ENSEMBLE MEAN ANOMALY- 500mbZ(m)
360H Forecast from: 00Z Sun JAN,24 2016
Valid time: 00Z Mon FEB,08 2016



BR/OS COLA/IBES

360 Hr Fcst Standardized Ensemble Mean 500 Z Anom : Valid 8 Feb 2016

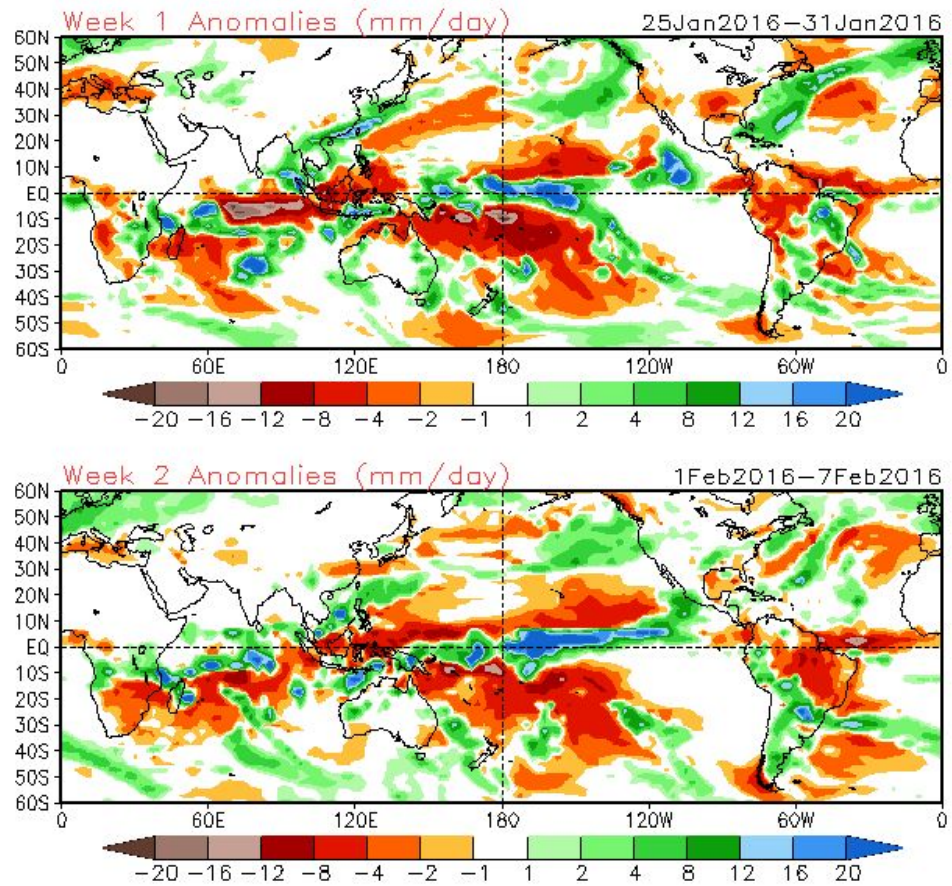
NCEP ENS. MEAN NORM. ANOM - 500mb Z(m)
360H Forecast from: 00Z Sun JAN,24 2016
Valid time: 00Z Mon FEB,08 2016



BR/OS COLA/IBES

CFS Week 1 and Week 2 PCPN Anomalies: Jan 24 initialized

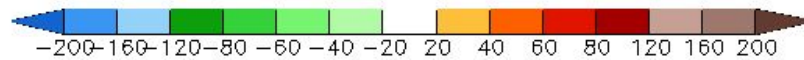
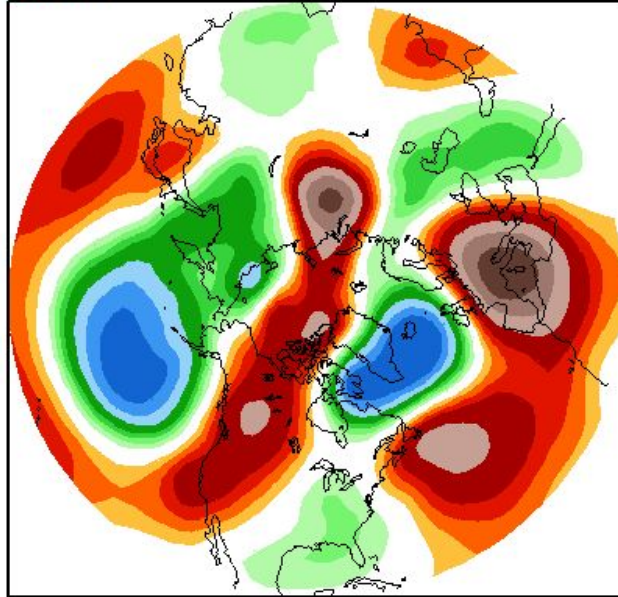
CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 24Jan2016



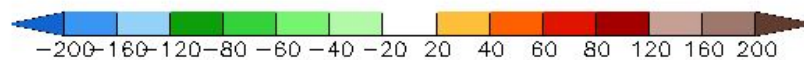
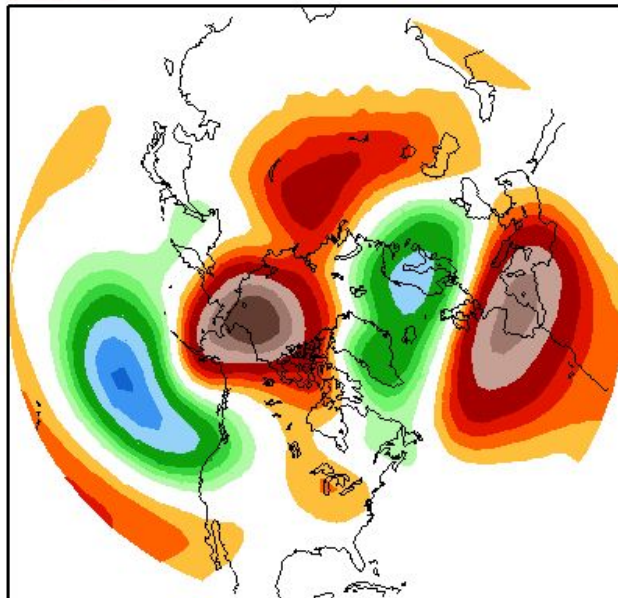
CFS Week 1 and Week 2 500 mb Height Anomalies: Jan 23 initialized

CFSv2 Weeks 1 & 2 500 hPa Z Anomalies (m)
16 Member Ensemble Mean Forecast from 24Jan2016

Week 1 25Jan2016–31Jan2016



Week 2 1Feb2016–7Feb2016



CFS Week 1 and Week 2 NA Pcpn Anomalies: Jan 23 initialized

CFSv2 Weeks 1 & 2 Precipitation
16 Member Ensemble Mean Forecast from 24Jan2016

